SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) PLAN

BP PRODUCTS NORTH AMERICA, INC.

WHITING BUSINESS UNIT

January 2014

BP Products North America, Inc.
Whiting Business Unit
2815 Indianapolis Boulevard
Whiting, Indiana 46394
(219) 473-3179

Prepared by:

O'Brien's Response Management Inc.
818 Town & Country Blvd., Suite 200
Houston, Texas 77024
(281) 320-9796 ● (281) 320-9700 FAX
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SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

Foreword **Page**

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN (Cont'd)

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN (Cont'd)

DISTRIBUTION LIST	
COPY NUMBER	**PLAN HOLDER**
1	Facility Copy BP Products North America, Inc. Whiting Business Unit 2815 Indianapolis Boulevard Whiting, IN 46394
2	O'Brien's Response Management Inc. (formerly known as Response Management Associates, Inc.) 818 Town & Country Blvd., Suite 200 Houston, TX 77024
	This document can be accessed via the Facility's intranet at http://whitingbpweb.com/main/

Note: The Distribution of this Plan is controlled by the Copy Number located on the front cover. Plan Distribution Procedures are provided in Section 1.2 and the Plan Review and Update Procedures are provided in Section 1.3 and should be followed when making any and all changes.

PROFESSIONAL ENGINEER CERTIFICATION

By means of this Professional Engineer Certification, I hereby attest, to the best of my knowledge and belief, to the following:

- I am familiar with the requirements of 40 CFR Part 112 and have verified that this Plan has been prepared in accordance with the requirements of this Part.
- I or my agent have visited and examined the Facility(s).
- I have verified that this Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part 40 CFR Part 112.
- I have verified that the required inspection and testing procedures have been established as described in this Plan.
- I have verified that the Plan is adequate for the Facility.
- My certification of this Plan in no way relieves the owner/operator of the Facility(s) of their duty to prepare and fully implement the Plan in accordance with the requirements of 40 CFR Part 112. I in no way assume any liability of whatsoever kind or nature by my certification, if owner/operator fails in their duty.
- The owner/operator, by "Management Approval" located on the following page, acknowledges this certification and the compliance measures described herein.

(Seal)

STATE OF TEXAS
ERIC G. POLITTE
77962
REGISTERED
PROFESSIONAL ENGINEER

Registered Professional Engineer

Eric G. Politte, P.E.
Response Management Associates, Inc.
State of Texas Registration No: 77962

Date: 3-13-03

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION

Facility Modification

- Date of Site Visit: August 11, 2009
- Description of Change:
  1. Addition of construction projects oil-filled operational equipment.
  2. See Appendix A, Construction Operational Equipment, for current listing.
- Impact of Change:
  1. The oil-filled operational equipment meets the qualification criteria in 40 CFR 112.76(k)(2) in lieu of general secondary containment.
  2. The Facility has established procedures for a monitoring program to detect equipment failure and/or a discharge.
  3. The Facility has an EPA Facility Response Plan and has a written commitment to respond with an Oil Spill Removal Organization.

Professional Engineer Certificate

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- The Plan, as it currently stands, and the original certification therein remains effective as provided with the exception noted above which is further certified below.

(Seal)

Registered Professional Engineer

Gautam K. Agrawala, Ph.D., P.E.
Compliance Consultant
O'Brien's Response Management Inc.
State of Texas Registration No: 101909

Date of Seal/Signature: 01/02/10

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION

Facility Modification

- Date of Site Visit: August 2009
- Description of Change: 1. Installation of Tanks 49, 46, 32, 33, and 34.
- Impact of Change:
  1. Attestation on secondary containment's ability to retain spilled product until cleanup occurs remains unchanged.
  2. Secondary containment volume for tanks identified above provided by Refinery WWTP.

Professional Engineer Certificate

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- The Plan, as it currently stands, and the original certification therein remains effective as provided with the exception noted above which is further certified below.

(Seal)

STATE OF TEXAS
GAUTAM K. AGRAWALA
101909
LICENSED
PROFESSIONAL ENGINEER

Registered Professional Engineer

Gautam K. Agrawala, Ph.D., P.E.
Compliance Consultant
O'Brien's Response Management Inc.
State of Texas Registration No: 101909

Date of Seal/Signature: 01/08/10

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION

Facility Modification

- Date of Site Visit: April 20, 2010
- Description of Change:
  1. Addition of construction projects oil-filled operational equipment, drum storage, and portable containers.
  2. See Appendix A, Construction Sites for current listing.
- Impact of Change:
  1. The oil-filled operational equipment meets the qualification criteria in 40 CFR§112.7(k)(2) in lieu of general secondary containment.
  2. The Facility has established procedures for a monitoring program to detect equipment failure and/or a discharge.
  3. The Facility has an EPA Facility Response Plan (i.e, Integrated Contingency Plan) and has a written commitment to respond with an Oil Spill Removal Organization.

Professional Engineer Certificate

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- The Plan, as it currently stands, and the original certification therein remains effective as provided with the exception noted above which is further certified below.

(Seal)

STATE OF TEXAS
GAUTAM K. AGRAWALA
101909
LICENSED
PROFESSIONAL ENGINEER

Registered Professional Engineer

Gautam K. Agrawala, Ph.D., P.E.
Compliance Consultant
O'Brien's Response Management Inc.
State of Texas Registration No: 101909

Date of Seal/Signature: 10/05/10

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION (Page 1 of 2)

Facility Modification

- Date of Site Visit: October 19, 2010
- Description of Change:
  1. Addition of Aboveground Bulk Storage Containers:
     (1) 3614, 3615, 3616, and 3617;
     (2) Container storage area (lab);
     (3) Container storage area (Southwest Central Receiving; and
     (4) 3573 & 2279 (Marine Dock).
  2. Removal of Aboveground Bulk Storage Containers:
     (1) 563;
     (2) Asphalt Loading Rack;
     (3) F Rack;
     (4) 4449, 3F-18, Parts Cleaner, Perc Tank, Soap Tank, Lube Tank, 11, 12, 13, 51331, 51333, and 51341;
     (5) Methanol Tank;
     (6) Inhibitor Drum;
     (7) 32;
     (8) Diesel Fuel Tank Trailer;
     (9) 3602;
     (10) Conductivity Improver, and
     (11) 3465, 3468, 3248, 3249, 3250, 3251, 3252, 3253, 136, 6078, 6153, 6248, 6249, 6251, 6253.
  3. Addition of construction projects oil-filled operational equipment, drum storage, and portable containers. (See Appendix A, Construction Sites for current listing).

- Impact of Change:
  1. Containment where aboveground bulk storage containers were added are adequated to contain the entire volume of the largest container plus sufficient freeboard.
  2. Containment where aboveground bulk storage containers still remain are adequate to contain the entire volume of the largest container plus sufficient freeboard.
  3. The oil-filled operational equipment meets the qualification criteria in 40 CFR§112.7(k)(2) in lieu of general secondary containment.

     The Facility has established procedures for a monitoring program to detect equipment failure and/or a discharge.

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION (Page 2 of 2)

Facility Modification (Cont'd)

- Impact of Change: The Facility has an EPA Integrated Contingency Plan (i.e, Integrated Contingency Plan) and has a written commitment to respond with an Oil Spill Removal Organization.

Professional Engineer Certificate

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- The Plan, as it currently stands, and the original certification therein remains effective as provided with the exception noted above which is further certified below.

(Seal)

STATE OF TEXAS
GAUTAM K. AGRAWALA
101909
LICENSED
PROFESSIONAL ENGINEER

Registered Professional Engineer

Gautam K. Agrawala, Ph.D., P.E.
Compliance Consultant
O'Brien's Response Management Inc.
State of Texas Registration No: 101909

Date of Seal/Signature: 11/05/10

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION (Page 1 of 2)

Facility Modification

- Date of Site Visit: April 20, 2011
- Description of Change:
  1. Addition of Aboveground Bulk Storage Containers:
     (1) UT-ORS-1
     (2) UT-ORS-2
     (3) UT-339-A
     (4) UT-339-B
  2. Removal of Aboveground Bulk Storage Containers:
     (1) 223
     (2) 224
     (3) 222
     (4) 114
     (5) 113
     (6) 148
     (7) 149
     (8) 150
     (9) 6149
  3. Addition of construction projects oil-filled operational equipment, drum storage, and portable containers. (See Appendix A, Construction Sites for current listing).
- Impact of Change:
  1. Containment where aboveground bulk storage containers were added are adequate to contain the entire volume of the largest container plus sufficient freeboard.
  2. Containment where aboveground bulk storage containers still remain are adequate to contain the entire volume of the largest container plus sufficient freeboard.
  3. The oil-filled operational equipment meets the qualification criteria in 40 CFR§112.7(k)(2) in lieu of general secondary containment.

     The Facility has established procedures for a monitoring program to detect equipment failure and/or a discharge.

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION (Page 2 of 2)

Facility Modification (Cont'd)

- Impact of Change: The Facility has an EPA Integrated Contingency Plan (i.e, Integrated Contingency Plan) and has a written commitment to respond with an Oil Spill Removal Organization.

Professional Engineer Certificate

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- The Plan, as it currently stands, and the original certification therein remains effective as provided with the exception noted above which is further certified below.

(Seal)

STATE OF TEXAS
GAUTAM K. AGRAWALA
101909
LICENSED
PROFESSIONAL ENGINEER

Registered Professional Engineer

Gautam K. Agrawala, Ph.D., P.E.
Compliance Consultant
O'Brien's Response Management Inc.
State of Texas Registration No: 101909

Date of Seal/Signature: 05/20/2011

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION

Facility Modification

- Date of Site Visit: October 25, 2011
- Description of Change:
  1. Addition or removal of construction projects oil-filled operational equipment. (See Appendix A, Construction Sites for current listing).
- Impact of Change:
  1. The oil-filled operational equipment meets the qualification criteria in 40 CFR§112.7(k)(2) in lieu of general secondary containment.

     The Facility has established procedures for a monitoring program to detect equipment failure and/or a discharge.

     The Facility has an EPA Integrated Contingency Plan (i.e, Integrated Contingency Plan) and has a written commitment to respond with an Oil Spill Removal Organization.

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- The Plan, as it currently stands, and the original certification therein remains effective as provided with the exception noted above which is further certified below.

(Seal)

STATE OF TEXAS
GAUTAM K. AGRAWALA
101909
LICENSED
PROFESSIONAL ENGINEER

Registered Professional Engineer

Gautam K. Agrawala, Ph.D., P.E.
Compliance Consultant
O'Brien's Response Management Inc.
State of Texas Registration No: 101909

Date of Seal/Signature: 02/14/2012

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION

Facility Modification

- Date of Site Visit: April 23 – 24, 2012
- Description of Change:
  1. Addition or removal of construction projects oil-filled operational equipment. (See Appendix A, Construction Sites for current listing).
- Impact of Change:
  1. The oil-filled operational equipment meets the qualification criteria in 40 CFR§112.7(k)(2) in lieu of general secondary containment.

     The Facility has established procedures for a monitoring program to detect equipment failure and/or a discharge.

     The Facility has an EPA Integrated Contingency Plan (i.e, Integrated Contingency Plan) and has a written commitment to respond with an Oil Spill Removal Organization.

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- The Plan, as it currently stands, and the original certification therein remains effective as provided with the exception noted above which is further certified below.

(Seal)

Registered Professional Engineer

Gautam K. Agrawala, Ph.D., P.E.
Compliance Consultant
O'Brien's Response Management Inc.
State of Texas Registration No: 101909

Date of Seal/Signature: 09/06/2012

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION

Facility Modification

- Date of Site Visit: November 16, 2012
- Description of Change:
  1. Installation of fifty-four (54) transformers: TR-39A, TR-39B, TR-56E, TR-56F, TR-60A, TR-60B, TR-60C, TR-60D, TR-60E, TR-60F, TR-60G, TR-60H, TR-61A, TR-61B, TR-61C, TR-61D, TR-62A, TR-62B, TR-62C, TR-62D, TR-62E, TR-62F, TR-63A, TR-63B, TR-63C, TR-63D, TR-63E, TR-63F, TR-64A, TR-64B, TR-64C, TR-64D, TR-64E, TR-64F, TR-64G, TR-64H, TR-64J, TR-64K, P-13, P-13 LTC, P-16, P-16 LTC, P-23, T-222, TR-66A, TR-66B, TR-66C, TR-66D, TR-66E, TR-66F, TR-67C, TR-67D, TR-68C, and TR-68D.
- Impact of Change:
  1. The oil-filled operational equipment meets the qualification criteria in 40 CFR§112.7(k)(2) in lieu of general secondary containment.

     The Facility has established procedures for a monitoring program to detect equipment failure and/or a discharge.

     The Facility has an EPA Facility Response Plan (i.e, Facility Response Plan) and has a written commitment to respond with an Oil Spill Removal Organization.

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- The Plan, as it currently stands, and the original certification therein remains effective as provided with the exception noted above which is further certified below.

Ralph Chaiet P.E.

(Seal) STATE OF TEXAS RALPH G. CHAIET 75161 LICENSED PROFESSIONAL ENGINEER

Registered Professional Engineer

Ralph Chaiet, P.E.
Compliance Consultant
O'Brien's Response Management Inc.
State of Texas Registration No: 75161
Date of Seal/Signature: 01/08/2013

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION

Facility Modification

- Date of Review: May 6, 2013
- Description of Change:
  1. Additions of new tanks Tk-801, Tk-977, Tk-979 and Tk-976.
  2. Addition or removal of construction projects oil-filled operational equipment. (See Appendix A, Construction Sites for current listing.
- Impact of Change:
  1. No negative effect to compliance of this SPCC Plan.

Professional Engineer Certificate

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- This Technical Amendment is only valid for the certification of the item(s) listed above and further certified below.

(Seal)

STATE OF TEXAS
RALPH G. CHAIET
75161
LICENSED
PROFESSIONAL ENGINEER

Ralph Chaiet P.E.

Registered Professional Engineer

Ralph Chaiet, P.E.
Compliance Consultant
Witt O'Brien's
State of Texas Registration No: 75161

Date of Seal/Signature: 7/2/2013

PROFESSIONAL ENGINEER CERTIFICATION FOR SPECIFIC FACILITY MODIFICATION

Facility Modification

- Date of Review: 12/12/2013
- Description of Change: 1. Addition of Tanks 101,102, 103, 104, and 6254.
- Impact of Change: 1. No negative effect to compliance of this SPCC plan.

Professional Engineer Certificate

- I have evaluated the change in Facility design and have determined that it does not materially affect the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.
- This Technical Amendment is only valid for the certification of the item(s) listed above and further certified below.

Ralph Chaiet P.E.

(Seal)

RGC

STATE OF TEXAS
RALPH G. CHAIET
75161
LICENSED
PROFESSIONAL ENGINEER

Registered Professional Engineer

Ralph Chaiet, P.E.
Compliance Consultant
Witt O'Brien's
State of Texas Registration No: 75161
Date of Seal/Signature: 1/22/2014

Implementation Requirements for BP Products North America, Inc. Whiting Business Unit Spill Prevention, Control, and Countermeasure Plan

The SPCC Compliance Review (November 16, 2012) of the Facility has identified the need for corrective action to bring the Facility into compliance with the Spill Prevention, Control and Countermeasures Planning requirements detailed in 40 CFR Part 112 (SPCC Planning regulation).

Upon satisfactory completion and documentation of the corrective action item(s) listed below, a technical amendment will be certified by the Professional Engineer. It is recommended that you complete the corrective action(s) and provide adequate documentation of completion as soon as possible. Without completion of these items the Professional Engineer Certification will be null and void.

Corrective Action Items:	Completion Scheduled Date Due	Completion Date * Completed
1. Provide documentation of tank capacity and adequate secondary containment for Lakefront Tank 569. [The wastewater exemption does not extend to this tank. The tank function is to hold hazardous waste until incineration.]		
2. Provide documentation that "undiked" piping found in various locations around the perimeter of the Refinery has required general containment or that the piping is DOT-regulated.		
3. Provide site diagram with Tank 801, 976, 977 and 979 identified.		
4. Provide site diagram with Tanks 101,102, 103, 104, and 6254 identified.		
5. Identify Industry Standard for Double-Walled Tanks.		

* Date should be initialed by Management when completed.

MANAGEMENT APPROVAL OF THE COMPLETION OF IMPLEMENTION ITEMS

Date: ____

Management Signature: ______________________________

Name and Title: ____________________________________

MANAGEMENT APPROVAL

Owner/Operator responsible for Facility: BP Products North America, Inc.

- Facility Name and (Physical) Location: Whiting Business Unit
  2815 Indianapolis Boulevard
  Whiting, Indiana 46394

- By signature below, the Manager approves this Plan and acknowledges that the elements identified within this Plan have been implemented.

- This page may be used for the initial Management Approval or for subsequent change of management and/or change of designated person accountable.

- This SPCC Plan will be implemented as herein described.

Signature: ____________

Name: Daniel J. Sajkowski

Date: August 23, 2006

Title: Leader Whiting Business Unit

Designated person accountable for oil spill prevention at the Facility:

Name: ____________

Title: Asset Manager

- This SPCC Plan will be implemented as herein described.

Signature: ____________

Name: Nick Spencer

Date: March 15, 2010

Title: Leader Whiting Business Unit

Designated person accountable for oil spill prevention at the Facility:

Name: ____________
Mark Woodward

Title: Operations Manager

- This SPCC Plan will be implemented as herein described.

Signature: ____________

Name: ____________

Date: ____________

Title: ____________

Designated person accountable for oil spill prevention at the Facility:

Signature: ____________

Name: ____________

Title: ____________

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

FACILITY NAME: Whiting Business Unit

FACILITY ADDRESS: 2815 Indianapolis Boulevard
Whiting, Indiana 46394

1. Does the Facility transfer oil over water to or from vessels ***and*** does the Facility have a total oil storage capacity greater than or equal to 42,000 gallons?

   __X__ YES ______ NO

2. Does the Facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** does the Facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

   ______ YES __X__ NO

3. Does the Facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** is the Facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the Facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan.

   __X__ YES ______ NO

4. Does the Facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** is the Facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula [1]) such that a discharge from the Facility would shut down a public drinking water intake[2]?

   ______ YES __X__ NO

5. Does the Facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** has the Facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

   __X__ YES ______ NO

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

______________________	______________________
Signature	Title
______________________	______________________
Name (please type or print)	Date

[1] If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2] For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

LOG OF PLAN REVIEW AND AMENDMENTS

NON TECHNICAL AMENDMENTS

- Non-technical amendments are not certified by a Professional Engineer.
- Examples of changes include, but are not limited to, phone numbers, name changes, or any non-technical text change(s).

TECHNICAL AMENDMENTS

- Technical amendments are certified by a Professional Engineer.
- Examples of changes include, but are not limited to, commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacements, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at a Facility.
- An amendment made under this section will be prepared within six (6) months of the change and implemented as soon as possible but not later than six (6) months following preparation of the amendment.

MANAGEMENT REVIEW

- Management will review this SPCC Plan at least each five (5) years and document the review on the form below.

Review/ Amend Date	Signature	Amend Plan (will/will not)	Description of Review Amendment	Affected Page(s)	P.E. Certification (Y/N)
04/20/10	GKA	Will	Semi-Annual Review	FWD-ii, FWD-vic, FWD-vid, FWD-vie, FWD-vii, FWD-ix, FWD-x, 1-4, 3-3 thru 3-5, Entire Appendix A, Cross Ref-2 thru Cross Ref-6	Y
10/19/10	GKA	Will	Semi-Annual Review	FWD-iii, FWD-vid, FWD-vie, FWD-vif, FWD-vig, FWD ix, FWD x, 1-5, 2-1, 2-2, 2-4, 4-1 thru 4-6, 5-3, 7-2, 7-3, Entire Appendix A, Entire Appendix C, Appendix D Page 7 of 15, Cross Ref 4	Y
05/11	GKA	Will	Semi-Annual Review	FWD-vi h thru FWD-vi j, FWD-ix, FWD-x, FWD-xi, Entire Appendix A	Y

LOG OF PLAN REVIEW AND AMENDMENTS					
Review/ Amend Date	**Signature**	**Amend Plan (will/will not)**	**Description of Review Amendment**	**Affected Page(s)**	**P.E. Certification (Y/N)**
10/11	GKA	Will	Semi-Annual Review	FWD-vi h thru FWD-vi j, FWD-ix, FWD-x, FWD-xi, Entire Appendix A	Y
09/12	GKA	Will	Technical Amendment	FWD-vi-i, FWD-vi-j, FWD-vi-k, FWD-x, FWD-xi	Y
11/12	DRK	Will	Technical Amendment	FWD-vi-j, FWD-vi-k, FWD-vi-l, FWD-x, FWD-xi, Entire Appendix A	Y
06/13	DRK	Will	Technical Amendment	FWD-vi k, FWD-vi l, FWD-x, FWD-xii, A-67, A-86	Y
12/13	DRK	Will	Technical Amendment	FWD-iv, FWD-vi l, FWD-vi m, FWD-x, FWD-xii, A-18, A-58, A-59, Attachment to Appendix C	Y

REVISION RECORD

It is the responsibility of the holder of this Plan to ensure that all changes and updates are made. The holder shall:

- Remove and discard obsolete pages.
- Replace obsolete pages with the updated pages.
- Initial once completed.

Change Date	Affected Page Number(s)	Description of Change(s)	Initial
February 2007	ii, x (insert), A-2 thru A-39, Cross Ref-2	Corporate Audit Update	
April 2008	FWD-ii, FWD-via, FWD-vib, FWD-vic, FWD-x, 1-2, 1-3, 3-1 thru 3-5	SPCC Review Update	
April 2009	FWD-v, FWD-via, FWD-vib, FWD-vic, FWD-vid, FWD-vie, FWD-x, 2-2, A-41(a)	SPCC Technical Amendment	
December 2009	FWD-via, FWD-vib, FWD-vic, FWD-x, App. A (all pages)	SPCC Technical Amendment and Tank Table Updates	
April 2010	FWD-ii, FWD-vic, FWD-vid, FWD-vie, FWD-vii, FWD-ix, FWD-x, 1-4, 3-3 thru 3-5, Entire Appendix A, Cross Ref-2 thru Cross Ref-6	Semi-Annual Review	
October 2010	FWD-iii, FWD-vid, FWD-vie, FWD-vif, FWD-vig, FWD ix, FWD x, 1-5, 2-1, 2-2, 2-4, 4-1 thru 4-6, 5-3, 7-2, 7-3, Entire Appendix A, Entire Appendix C, Appendix D Page 7 of 15, Cross Ref 4	SPCC Technical Amendment and Tank Table Updates	
November 2010	FWD-vii, FWD-x		
December 2010	FWD-x, 4-5 thru 4-8, Appendix A beginning with A-28 (keep inserts after Area Map and Figures A-2, A-3, and A-4 Appendix D (remove all and replace with D-1)	SPCC Technical Updates and Tank Table Updates	
April 2011	FWD-vi f thru FWD-vi i, FWD-ix, FWD-x, Entire Appendix A	SPCC Technical Updates and Tank Table Updates	
October 2011	FWD vi h thru vi j, FWD-ix, FWD-x, FWD-xi, Entire Appendix A	SPCC Technical Updates and Tank Table Updates	
September 2012	FWD-vi-i, FWD-vi-j, FWD-vi-k, FWD-xi	Technical Amendment	
November 2012	FWD-vi-j, FWD-vi-k, FWD-vi-l, FWD-x, FWD-xi, Entire Appendix A	Technical Amendment and Tank Table Updates	
December 2012	Cover Page, FWD-vi-j, FWD-vi-k, FWD-xi, 1-5, 2-1, 2-2, 2-4, 4-1 thru 4-6, 5-3, Entire Appendix A, Cross Ref-4	Technical Amendment, Implementation Requirement added, Changed “ICP” references to “FRP”	

REVISION RECORD

It is the responsibility of the holder of this Plan to ensure that all changes and updates are made. The holder shall:

- Remove and discard obsolete pages.
- Replace obsolete pages with the updated pages.
- Initial once completed.

Change Date	Affected Page Number(s)	Description of Change(s)	Initial
June 2013	FWD-vi k, FWD-vi l, FWD-x, FWD-xii, A-67, A-86	Technical Amendment	
December 2013	FWD-iv, FWD-vi l, FWD-vi m, FWD-x, FWD-xii, A-18, A-58, A-59, Attachment to Appendix C	Technical Amendment	

1.0 INTRODUCTION, ADMINISTRATION AND COMPLIANCE

1.1 FACILITY DESCRIPTION

This Spill Prevention, Control, and Countermeasure (SPCC) Plan has been developed in accordance with the regulatory requirements of 40 CFR Part 112 (EPA) for the BP Products North America, Inc. Whiting Business Unit (hereinafter referred to as “Facility”). The Facility has the following general operating and design characteristics:

- The Facility is located on approximately 1,700 acres in Whiting, East Chicago, and Hammond, Indiana, near the southern tip of Lake Michigan. The Facility employs approximately 1,300 people and produces a variety of products, including gasoline of all grades, diesel fuel, heating fuel, jet fuel, asphalt and coke. The Facility can process up to 420,000 barrels of crude oil per day to produce these products.
- The Facility receives product in via pipeline.
- The Facility ships products out via truck, rail, pipeline, barge, and ship.
- The “Potential Spill Sources and Container Identification” table is provided in Appendix A.
- A diagram of the Facility is provided in Appendix A.

1.2 PLAN PURPOSE/OBJECTIVES

The specific objectives of this Plan are to define the spill prevention, control, and countermeasures for the Facility and to assist Facility personnel in establishing and maintaining an efficient and effective program. This is accomplished in the Plan by addressing:

- Personnel, Training and Spill Prevention Procedures.
- Inspections and Records.
- Facility Drainage.
- Bulk Storage Containers and Operational Equipment.
- Transfer Operations, Pumping, and In-Plant Processes.
- Tank Car and Tank Truck Loading/Unloading Rack.
- Security.

1.3 PLAN DISTRIBUTION PROCEDURES

The Emergency Response Specialist shall have the responsibility for distribution of the Plan. Distribution will be handled in the following manner:

- Distribution of the Plan is controlled by the number on the front cover. A distribution list is included in the Foreword to facilitate control and to identify the current holders of the Plan.

- The Facility shall maintain a complete copy of the Plan at the Facility. The Plan will be available to the Regional Administrator for on-site review during normal working hours.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

The "Designated Person Accountable for Oil Spill Prevention" (identified on the Management Approval page in the Foreword) with support from the Emergency Response Specialist will coordinate the following Plan review and update procedures:

Facility Changes requiring Plan Revision

- This Plan will be revised when there are changes in the Facility's design, construction, operation, or maintenance that materially affects the Facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines. Such amendments to the Plan shall be prepared within six (6) months and implemented as soon as possible but not later than six (6) months following preparation of the Plan amendment.

The Facility maintains a Management of Change (MOC) database to manage change under OSHA's Process Safety Management. These changes are identified and reviewed prior to implementation. When change is associated with the SPCC Plan, as identified below, MOC Coordinator will forward the information to the certifying Professional Engineer for evaluation as a technical amendment to the SPCC Plan.

Changes requiring revision may include, but are not limited to:

- ■ Commission or decommission of containers. (Containers include aboveground and underground storage tanks, oil filled transformers and operational equipment containing 55 gallons or greater.)
- ■ Replacement, reconstruction, or movement of containers.
- ■ Reconstruction, replacement, or installation of piping systems.
- ■ Construction or demolition that might alter secondary containment structures and/or drainage systems.
- ■ Changes of product or service.
- ■ Revision of standard operating or maintenance procedures at the Facility.

Revisions that are made to the Plan are classified into either "Technical Amendments" or Non-Technical Amendments".

1.4 PLAN REVIEW AND UPDATE PROCEDURES (Cont'd)

Technical Amendments

- All technical amendments, such as the ones listed earlier in this Section and on the "Log of Plan Review and Amendments" page must be certified by a Registered Professional Engineer to satisfy the requirements of 40 CFR Part 112.4.

- Each certified technical amendment will be stamped and dated in its appropriate section of the Plan and recorded on the "Log of Plan Review and Amendments" located in the Foreword.

Non-Technical Amendments

- All non-technical amendments such as changes to phone numbers and/or contacts or other non-technical text changes need only to be signed off by management. The "Log of Plan Review and Amendments" located in the Foreword will be used to record such changes.

Inclusion of Amendments into the Plan

- The Emergency Response Specialist will coordinate the word processing, publication, and distribution efforts of completing the revisions and maintaining the Plan.

- The **Plan Holder**, immediately upon receipt of any revisions, shall review and insert the revised pages into the Plan and discard the obsolete pages. This action should then be recorded on the "Log of Plan Review and Amendments" and "Revision Record" page in the Foreword.

- The official "Controlled Copy" is maintained in the Security office and will be the copy to be referenced upon request by any agencies in the event of a Facility inspection. The document is also maintained electronically on the Facility's intranet and can be accessed by any authorized user of the Facility's network.

Five-Year Review

- At least once every five (5) years the Facility will complete a review and evaluation of this SPCC Plan and make amendments within six (6) months of the review. This review will include, at a minimum, a review of the following:

  - Applicability of new prevention and control technology which may significantly reduce the likelihood of a spill event from the Facility if such technology has been field-proven at the time of the review.
  - Accuracy of the SPCC Plan as compared to the current Facility operation and SPCC Regulations.
  - Capacity and structural integrity of secondary containment structures.
  - SPCC inspection and record files to ensure continuity for a minimum period of three (3) years.

- Any amendment(s) must be implemented as soon as possible but not later than six (6) months following preparation of any amendment.

1.4 PLAN REVIEW AND UPDATE PROCEDURES (Cont'd)

Five-Year Review (Cont'd)

- The Facility will amend the Plan within 30 days to comply with the Regional Administrator's findings that do not meet the requirements of Part 112.4 or that amendment which is necessary to prevent and contain discharges from the Facility. The amendments by the Regional Administrator are based on the review of the following:
  - Information submitted to comply with Part 112.4(a) – Spill Documentation
  - Submission of information to EPA by the State agency in charge of oil pollution control activities under 112.4(c), where the agency may conduct a review and make recommendations to the Regional Administrator
  - On-site review of the Plan

Training and Emergencies

Opportunities to review the Plan may arise from regularly scheduled training sessions or actual emergencies which require the activation of the Plan.

- Examples of these types of opportunities may occur during:
  - Tabletop Exercises
  - Discharge Prevention Meetings
  - Actual emergency responses

1.5 REGULATORY COMPLIANCE

This Plan addresses the following regulatory requirements:

- Federal Spill Prevention, Control, and Countermeasure Regulation: U.S. EPA Final Rule for Oil Pollution Prevention; Non-Transportation Related On-shore and Offshore Facilities (40 CFR Part 112 - as amended November 13, 2009).

- A detailed cross-reference between the format of this Plan and that of the regulation is provided at the end of this document in "Cross Reference".

General Applicability

This requirement applies to owners or operators of non-transportation-related onshore and offshore facilities engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, and that meet each of the following criteria:

- Due to their location, could reasonably be expected to discharge oil in harmful quantities into or upon the navigable waters of the United States or adjoining shorelines **and**;

1.5 REGULATORY COMPLIANCE (Cont'd)

General Applicability (Cont'd)

- Has an aggregate aboveground storage capacity in excess of 1,320 gallons, excluding containers less than 55 gallons **or;**

- Completely buried storage capacity in excess of 42,000 gallons, excluding any tanks, connected underground piping, underground ancillary equipment, and containment systems subject to the technical requirements of 40 CFR Part 280 or 281.

Submission of Spill Documentation

The Facility shall submit the documentation required by 40 CFR Part 112.4 to the EPA Regional Administrator within sixty (60) days whenever the Facility has a discharge event(s) which meets one of the following conditions:

- Discharges more than 1,000 gallons of oil (or oil products) into or upon the navigable waters of the United States or adjoining shorelines in a single spill event **or,**

- Discharges more than 42 gallons of oil (or oil products) into the navigable waters of the United States in two (2) spill events within any 12-month period.

A form detailing the documentation requirements to be included with this submission is provided in Appendix B.

1.6 CONFORMANCE WITH OTHER REQUIREMENTS

- As of the publish date of this Plan, there are no local or state regulations that are more stringent than the Federal Regulations for an SPCC Plan.

1.7 IMPRACTICABILITY

The containment and/or diversionary structures or equipment to prevent a discharge are practicable:

- A written commitment of manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged is provided in the FRP.

2.0 NOTIFICATION AND RESPONSE PROCEDURES

This section is a guide for notification and response procedures that must be implemented immediately after discovering a discharge incident and securing the source (if at all possible). All notifications are of extreme importance and must be completed in a timely manner.

2.1 COUNTERMEASURES

The Facility discharge discovery, response and cleanup capabilities are described as follows:

- The discharge discovery capabilities of the Facility are provided by the engineering controls (see Sections 4, 5, 6, 7, and 8) and the training and inspection programs (see Section 3) in place at the Facility.
- The discharge response and notification capabilities of the Facility have been summarized in this Section.
- The Facility has a Facility Response Plan in accordance with 40 CFR 112.20 in place which provides details of the Facility's response capability including notification procedures, response actions, clean-up capabilities (including contractor capabilities), response equipment available at the Facility, response team organization and identification of environmental and socio-economic sensitivities.
- The Facility maintains an inventory of spill response equipment that can be rapidly deployed in the event of a discharge. In addition, the Facility has contractual arrangements with Oil Spill Removal Organizations (OSROs) that are also listed in the Facility Response Plan.

2.2 INTERNAL NOTIFICATION

- First Facility Person Notified/On-Scene should immediately notify personnel involved in any transfer(s) and Facility Management.
- Based on site conditions, the Facility-designated liaison will then make the necessary notifications (initial telephone reference is provided in Figure 2.1).

2.3 EXTERNAL NOTIFICATION

The external notifications should be made in accordance with federal, state, and local regulations for all reportable discharges (telephone reference is provided in Figure 2.1). A "Notification Data Sheet" (Figure 2.2) should be used to facilitate documentation and data retrieval for these notifications.

FIGURE 2.1

NOTIFICATION REFERENCES			
AGENCY	ADDRESS	PRIMARY	ALTERNATE
National Response Center	c/o U.S. Coast Guard (CG-3RPF-2) – Room 2111-B 2100 2ND Street SW Washington, DC 20593-0001		

FIGURE 2.2

NOTIFICATION DATA SHEET

Date: ______________________ *Time:* ______________________

INCIDENT DESCRIPTION

Reporter's Full Name: ______________ *Position:* ______________
Day Phone Number: ______________ *Evening Phone Number:* ______________
Company: BP Products North America, Inc. *Organization Type:* ______________
Facility Address: Whiting Business Unit
2815 Indianapolis Blvd.
Whiting, IN 46394
Owner's Address BP Products North America, Inc.
28100 Torch Parkway
Warrenville, IL 60555
Facility Latitude: ______________ *Facility Longitude:* ______________
Spill Location: ______________
(if not at Facility) ______________
Responsible Party's Name ______________ *Phone Number:* ______________
Responsible Party's Address: ______________
Source and/or cause of discharge: ______________

Nearest City: Whiting
County: Lake *State:* IN *Zip code:* 46394
Section: ______ *Township:* ______ *Range:* ______ *Borough:* ______
Distance from City: ______________ *Direction from City:* ______________
Container Type: ______________ *Container Storage Capacity:* ______________
Facility Oil Storage Capacity: ______________
Material:

Total Quantity Released	**Water Impact (YES or NO)**	**Quantity into Water**

RESPONSE ACTION(S)

Action(s) taken to Correct, Control, or Mitigate Incident: ______________

Number of Injuries: ______________ *Number of Deaths:* ______________
Evacuation(s): ______________ *Number Evacuated:* ______________
Damage Estimate: ______________
More information about impacted medium: ______________

CALLER NOTIFICATIONS

National Response Center (NRC): 1-800-424-8802, (202) 267-2675 (alternate)
Additional Notifications (Circle all applicable): *USCG* *EPA* *State* *Other*

ADDITIONAL INFORMATION

Any information about the incident not recorded elsewhere in this report: ______________

NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.

2.4 RESPONSE PROCEDURES

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

It is important to note that **these actions are intended only as guidelines**. The appropriate response to a particular incident may vary depending on the nature and severity of the incident and on other factors that are not readily addressed. Note that, **without exception, personnel and public safety is first priority**.

The first Facility person on scene will function as the person-in-charge until relieved by an authorized supervisor. Transfer of command will take place as more senior management respond to the incident.

INITIAL RESPONSE ACTIONS - SUMMARY
• Personnel and Public Safety is first priority
• Eliminate sources of ignition
• Isolate the source of the discharge, minimize further flow
• Make internal notifications
• Make external notifications
• Activate Facility resources as necessary
• Activate response contractors and other external resources as necessary
• Monitor and control the containment and clean-up effort

2.5 DISPOSAL METHODS

The Facility has established the following methods of disposal for recovered materials in accordance with applicable legal requirements:

- The primary option is to recycle any product as circumstances allow.
- If this is not an option, the recovered products will be segregated into the appropriate waste streams (Oily - Liquid Wastes, Non-Oily - Liquid Wastes, Solid Wastes, Oily - Solid/Semi-Solid Wastes, Non-Oily - Solid/Semi-Solid Wastes) and disposed of as dictated by local, state, or federal requirements.
- The Facility has a Facility Response Plan in place which provides additional disposal plan detail.

2.6 DISCHARGE PREVENTION MEASURES

In addition to being prepared to respond to an oil spill, the Facility also has prevention measures in place to minimize the chances of an accidental discharge. The Facility discharge prevention measures, including procedures for routine handling of products (loading, unloading, and Facility transfers, etc.), are described as follows:

- The Facility's training and briefing program ensures oil-handling personnel are familiar with the Plan and are capable of reporting a discharge (see Section 3).
- The Facility has been designed, and is maintained, in order to prevent discharges as described in this Plan (see Sections 4, 5, 6 and 7).
- Loading/unloading measures ensure that truck drivers are aware of the necessity to inspect vehicle drains and outlets prior to filling and departure (see Section 7).
- Security measures prevent access of unauthorized persons to the Facility (see Section 8).

3.0 TRAINING AND INSPECTIONS

3.1 PERSONNEL TRAINING AND DISCHARGE PREVENTION PROCEDURES

Training (Initial)

- The Facility provides the following minimum initial training to oil-handling personnel:

  - Operation and maintenance of equipment to prevent oil discharges;
  - Oil discharge procedure protocols;
  - Applicable oil spill prevention (State & Federal) laws, rules, and regulations;
  - General Facility operations; and,
  - The contents of the Facility SPCC Plan and applicable pollution control laws, rules, and regulations.

- All truck drivers (e.g. Company and third-party vendors) that perform loading and unloading activities at the Facility are the interface between the Facility's "oil-handling" personnel and DOT-related activities. These drivers include employee and non-employee truck drivers. All truck drivers using BP Facilities are appropriately trained to carry out their activities in a safe and environmentally sound manner.

- Every new driver receives initial training prior to being approved to load/unload at the Facility. The initial driver training includes:

  - Facility safety rules and loading rack orientation;
  - Proper loading/unloading procedures and hazards identification;
  - Loading rack emergency shutdown systems;
  - Emergency response actions steps and notification numbers;
  - Emergency routes; and
  - Spill reporting.

- All drivers must certify that they have received and understand the training before they are allowed to carry out loading/unloading activities at the Facility.

- The Training Program is conducted by one or more of the following:

  - Computer-based [Virtual Training Assistance (VTA)]
  - Classroom instruction
  - On-the-Job Training (Operation & Maintenance)

- Training records are maintained at the Facility for a minimum period of three (3) years.

- A sample Training Log is provided in Appendix B.

Briefings (Annual)

- The Facility conducts prevention briefings for Company oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for the

Facility.

3.1 PERSONNEL TRAINING AND DISCHARGE PREVENTION PROCEDURES (Cont'd)

Briefings (Annual)

- The program is conducted through computer-based training and classroom instruction. The computer based training (Virtual Training Assistance) consists of various courses, including SPCC, that can be accessed by computer. At a minimum, oil-handling personnel are trained in the operation and maintenance of equipment to prevent discharges, discharge procedure protocols, applicable pollution control laws, rules, regulations, general Facility operations and the contents of the Facility SPCC Plan. The VTA program is able to track each employees' training and provide a detailed report. The reports are accessible by password at the Facility.

- These briefings include discussion of potential discharges or component failures and precautionary measures.

- Briefing records are maintained at the Facility for a minimum period of three (3) years.

- A sample Discharge Prevention Briefing Log is provided in Appendix B.

3.2 INSPECTIONS, TESTS AND RECORDS

3.2.1 Container Testing and Inspections

- All aboveground bulk storage containers are integrity tested on a regular schedule and when material repairs are made.

- Comparative records are kept. Comparative records are maintained on site for a minimum period of three (3) years.

- The container inspection programs conducted and maintained by Facility personnel are as follows:

  - The containers are visually inspected by operating personnel for signs of deterioration, leaks, or the accumulation of liquids inside the containment areas.
  - Each storage container is inspected per Facility policy (Refer to ***BP Whiting Business Unit Oil Movement Division Policy Manual Owner/User QC Manual***), as required by age, condition, and service.
  - Based on these conditions, the aboveground bulk storage containers are professionally inspected and non-destructive thickness testing is performed.

3.2 INSPECTIONS, TESTS AND RECORDS (Cont'd)

3.2.1 Container Testing and Inspections (Cont'd)

- The required inspections are divided into three categories:
  - Routine, in-service inspections
  - In-service, external inspections
  - Out-of-service, internal inspections

INSPECTION TYPE	FREQUENCY	INSPECTOR QUALIFICATION OR TRAINING	DOCUMENTATION	RECORD RETENTION
External API 653 (in-service)	Lesser of 5 years OR ¼ of the life of the shell	API 653 Certified Inspector	API 653 Certified report	Life of the tank
Ultrasonic Testing of Shell (In-service)	Lesser of 15 years OR ½ the life of the shell	Level II or Level III of ASNT SNT-TC-IA (see API 650 paragraph 6.3.2, 10 edition, Addendum 3)	API 653 Certified report	Life of the tank
Internal API 653 (out-of-service)	Lesser of 20 years OR the life of the tank bottom	API 653 Certified Inspector	APR 653 Certified report	Life of the tank

- If a field-constructed aboveground bulk storage container undergoes a repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or failure due to brittle fracture, the container will be evaluated (see Sample Log in Appendix B).

- Drums or totes brought on-site are built or tested to the standard(s) or in-process inspection and testing procedures established by the drum manufacturer or the drum recycler, as applicable.

- While on-site, the tote tanks will be kept off the ground and visually inspected during daily operating rounds and during the biweekly inventory rounds. The tanks are also pressure tested every time they are returned to the vendor for product replacement.

- Liquid level sensing devices are regularly tested.

3.2.2 Qualified Oil-Filled Operational Equipment Inspection

- Transformers identified as qualified oil-filled operational equipment visually inspected.

- Reference: Oil Filled Transformer: Tank Inspection Report

3.2 INSPECTIONS, TESTS AND RECORDS (Cont'd)

3.2.3 Aboveground Valves and Pipelines Inspections

The Facility's aboveground valves and pipelines are examined as follows:

- Aboveground valves and pipes/pipelines are regularly examined during operating personnel rounds. During these examinations, operating personnel assess the general condition and necessity for corrective actions of items such as:

  - Flange joints
  - Valve glands and bodies
  - Pipe supports
  - Metal surfaces
  - Expansion joints
  - Catch pans
  - Valves locks and/or seals
  - Other appurtenances

- During routine rounds, operations personnel visually inspect aboveground valves and pipelines in their areas. During these rounds, the general condition of flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, and metal surfaces are assessed.

- Piping passing through concrete underground tunnel beneath Indianapolis Blvd. from Indiana Tank Farm is visually inspected daily at the openings of the tunnel and the piping is included in the Company's API 570 inspection program.

- As part of the Facility's Volatile Organic Compound (VOC) leak monitoring program, pump seals are inspected monthly; quarterly for most light gas and pipeline valves are tested annually. Equipment which is found to be in poor condition is repaired and retested. Records on these inspections are kept in the Environmental Control Division's file for at least five (5) years. Quarterly reports are provided to the Indiana Department of Environmental Management.

- Periodic pressure testing may be warranted for piping in areas where Facility drainage is such that a failure might lead to a spill event.

- Pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction.

- Vertical or horizontal pipe supports are inspected and repaired as needed:

  - Saddle cradling
  - Protective sleeve
  - Hanger

3.2.4 Buried Piping Inspections

- Buried piping is present at the Facility.

3.2 INSPECTIONS, TESTS AND RECORDS (Cont'd)

3.2.4 Buried Piping Inspections (Cont'd)

- When practical, projects are engineered to install pipelines aboveground, minimizing underground lines in the Facility. However, in cases where underground lines are applicable, such as under roadways, they are sleeved, cathodically protected and/or wrapped for corrosion protection.

- Oil Movements has an ongoing program for coating and wrapping older piping that are exposed when lines are dug up for modification or repair. Exposed lines are also visually inspected and ultrasonically tested for corrosion, deterioration, and damage and are replaced or repaired as needed. All formal records of such activities are kept in the Inspection Department's files. Oil movements also has an ongoing line raising road crossing project pursuant to Agreed Order with Indiana Department of Environmental Management in the Facility, Tank Fields and recently completed at the Marine Docks. Where practical, lines are being brought out of the ground and put in overhead Pipe Racks. Also, there are lines outside of the Facility that are cathodically protected. These lines include the LPG lines from the Facility, lines owned and operated by BP Pipeline Company, and nitrogen and oxygen pipelines from Prax Air. Underground lines at the Marine Docks Facility are also cathodically protected.

- Underground pipelines are periodically tested for leaks. Approximately 60 lines are tested each year. A priority is carefully assigned to each line to be tested and a schedule is set for the year. The lines are tested in accordance with Oil Movement Operating Procedure, OPGEN02. The basic principle in testing the line is to block it in, pressure the line, and observe any pressure drop. Should a significant pressure drop occur, the line is "shortened up" to pinpoint the location of the leak. Acoustic test methods are also available to determine leak location. All records of these inspections and line repairs are formally kept by the Oil Movement Division.

3.2.5 Documentation

- Records of the inspections and tests (including those maintained under usual and customary business practices), signed by the appropriate supervisor or inspector are retained on file at the Facility and/or other Corporate location for a minimum period of three (3) years.

- Sample inspection and test records are provided in Appendix B.

4.0 FACILITY DRAINAGE

4.1 DIKED STORAGE AREA DRAINAGE SYSTEMS

Drainage of stormwater or other liquids accumulated within the Facility's diked storage area is controlled as follows (Refer to Figures A-3 and A-4):

Tank Fields

- Tanks within the tank fields and most tanks within the Facility proper are diked. Diked areas are designed to contain the maximum volume of fluids in the tanks, plus additional precipitation volume from selected storms. In the event a diked area is insufficient to contain the total tank fluids plus precipitation, two adjacent diked areas are connected by piping or lowering common dike walls. Most tank dike drains and water draw systems eventually drain to the process sewer and in most cases pass through some type of oil/water separation device to recover oil before entering the process sewer. The J&L Crude tankfields drain into the outfall #003 system via manually operated surface drain valves and piping. This system has an oil/water separator in place.

J&L Tank Field

- The J&L Tank Field consists of individual product storage areas bound on the north by Cline Ave., the east by CSX RR, the south by Lake George Branch of the Indiana Harbor Ship Canal, and the west by Calumet Avenue. Two of the storage facilities within the field are not regulated under present SPCC regulations. They are, the LPG (Liquified Petroleum Gas Facility) cavern, and the Cal Nitro Sphere Area consisting of seven spheres. Both of these facilities store products that are gases at atmospheric temperature and pressure.

- Crude oils are received at the Facility via pipeline through the manifold located in the southeast corner of the J&L Crude Field. Potential pathways for oil to reach navigable waters, assuming the oil breaches the dike walls, are in Facility drainage ditches that run along the north, west and southern perimeter of the crude field. This ditch system empties into the canal through the Facility's NPDES Outfall No. 003.

- Containment measures in this outfall system are discussed in the Facility Response Plan. The Cline Avenue drainage ditch also has the potential to carry product to the canal via the Calumet Avenue drainage ditch. Containment measures along the canal are discussed in the Facility Response Plan. Should oil breach the dike on the eastern side of the crude field, or the J&L separator be overwhelmed through the water draws or area drains, the oil would flow overland to the NPDES Outfall No. 004 drainage ditch. Control measures at this outfall are discussed in the Facility Response Plan.

- J&L Shipping Field is used for the blending, storage and shipping of finished gasoline and distillate products. Products from the fifteen (15) product tanks are shipped to Badger, West Shore, and White Oak Pipelines. The shipping/transfer manifold is located within the dike area between 3905 and 912 tanks. A catastrophic oil spill from this tank field could cause oil to enter the dikes of the J&L Crude Field located to the west of the J&L Shipping Field. A spill to the north would cause oil to flow into the Facility and Cline Avenue ditches and eventually flowing to the canal or Outfall No. 003 as described above. Spills within the dikes that overwhelm the dike water lift station pumps at the "LPG Separator" would cause some oil to flow into the Outfall No. 004 drainage ditch. Spills breaching the dikes to the east and south of the J&L Shipping Field could also flow into the outfall #004 system. The area immediately to the southeast of the field is fairly flat, resulting in ponding of the oil in the area unless the volume of oil spilled over the dike was very large.

4.1 DIKED STORAGE AREA DRAINAGE SYSTEMS (Cont'd)

Lake George Tank Field

- Lake George Tank Field consists of tanks used for a variety of product storage. Bound on the north by 129th Street, the east by CSR Railroad, the south by Cline Ave., and the west by Calumet Ave. This field is separated from the J&L Crude and Shipping Fields by Cline Avenue. Facility DGO (recycle oil) is stored, dewatered, and injected to the Pipe Stills using the pump manifolds found south of 6l9 tank. Tanks 641 and 639 (swing service) are used to store and supply Xylene to Decatur Pipeline. The remaining tanks are used to store naphtha and distillate feedstocks as well as gasoline and distillate base blending components. Catastrophic failure of the northern most tanks and their dikes in the Lake George Tank Field would most likely result in oil on 129th Street and its associated drainage ditches. The oil would run west along the 129th Street ditch to the Calumet Avenue ditch and subsequently to the canal. Control measures on the canal are described in the Facility Response Plan. Failure of one of the four eastern most tanks could result in oil entering the residential street in that area and draining into the City of Whiting storm sewers. Should the oil enter the storm sewers in that area it would flow through the city sewers to a retention pond north of the city. Water from this pond is subsequently pumped to the Hammond Sanitary District. Oil breaching the dikes to the south would flow toward the relatively flat area formerly occupied by the Union Tank car repair facility. If the oil flowed far enough south, the Cline Avenue ditch would intercept the flow and carry it to the Calumet Avenue ditch and subsequently to the canal. Any oil leaving the dikes to the west of the tank field would enter the Calumet Warehouse drainage system and subsequently enter the 129th Street ditch. Oil breaching the dikes to the east would most likely pond along the adjacent CSX tracks with some oil potentially flowing to 129th Street and into its drainage ditches. The break in the "watershed" along 129th Street is at the CSX railroad tracks. Oil entering the roadway at this point may flow either west along 129th Street to Calumet Avenue or east along 129th Street to the storm sewers. Certain conditions pertaining to the oil release could result in oil being released into the Stieglitz Park Tank Field.

Stieglitz Park Tank Field

- Stieglitz Park contains tanks and a variety of pumps used to move products within the J&L Field, to Indiana and South Tank Fields, and to the Facility. The tank field handles a variety of reduced crude products including asphalt, gas oil, and decanted oil. In addition, blending and final processing of jet fuel is done in the Stieglitz Park Tank Field. This field is separated from the rest of the J&L Tank Field complex by the CSX railroad tracks to the west. Oil breaching the dikes to the north would flow east into 129th Street storm sewers into the Indianapolis Blvd storm sewers which eventually empty into the canal. If the volume of oil entering 129th Street was greater than the storm sewers capacity, the oil may continue east to Indianapolis Blvd. and enter its storm sewers which eventually empty into the canal. Control structures to recover oil in the Indianapolis Blvd. storm sewers are discussed in the Facility Response Plan. The northeast corner of this tank field contains a large landscaping berm which would prevent oil from a catastrophic failure from immediately entering the intersection of Indianapolis Blvd. and 129th Street. Oil that flowed west along the berm would be intercepted by drainage to the sump at the entrance of Stieglitz Park Tank Field. Oil that moved southeast along the berm would flow into the contractor trailer and parking area and eventually into the Indianapolis Blvd. storm sewer. The contractor trailer area is a low area. Spills flowing east out of the tank field would most likely pond in this area.

4.1 DIKED STORAGE AREA DRAINAGE SYSTEMS (Cont'd)

Stieglitz Park Tank Field (Cont'd)

- Spill breaching the dike to the west would pond in the CSX railroad track area with some oil potentially entering the 129th Street storm sewers. Spills may, in certain cases, also enter the Lake George tank dikes. A spill to the south would be contained by the embankment elevating Cline Avenue and flow to the south east into the contractor parking area where it would tend to pond before entering the Indianapolis Blvd. storm sewer.

South Tank Field

- The South Tank Field Complex consists of individual tank fields contained within the area bound by Indianapolis Blvd. on west, 129th Street on the north, the EJ&E and Indiana Harbor Belt railroad tracks on the east, and Riley Road to the south. The boat docks and its associated tanks, located south of Riley Road at the Indiana Harbor ship canal are also considered part of the South Field complex.

- The largest portion of the complex, containing twenty-nine tanks, is designated the South Field and is separated from the rest of the complex by Cline Avenue which runs generally east and west through the area. Gasoline and distillate base components are stored and blended for shipment in the South Field. The BP Pipeline shipping manifold pumping station is located inside the northeast corner of this tank field. A spill breaking through the dikes to the north would result in oil entering the drainage ditches along 129th Street. The break point between east-west flow in this area roughly coincides with the Whiting/East Chicago corporate limits. Oil released within Whiting would flow west along the road to Indianapolis Blvd. and subsequently down the Indianapolis Blvd. sewer to the Harbor canal. Control measures along Indianapolis Blvd. are discussed in the Facility Response Plan. Oil in East Chicago will flow east along 129th Street and its associated ditches until it reaches the 129th Street storm sewers just east of the Indiana Harbor Belt railroad tracks. The 129th Street storm sewer flows east to Dickey Road where it enters that roads storm sewer. The Dickey Road storm sewer flows southeast to discharge into the Indiana Harbor Canal. Spills leaving the dikes to the east will tend to pond along the EJ&E and Indiana Harbor Belt right-of-way with a slight tendency to flow south along the tracks toward Riley Road. A catastrophic tank failure to the west would cause oil to flow onto Indianapolis Blvd. and into those storm sewers, eventually reaching the canal. A large landscaping berm is located in the northwest corner of the tank field adjacent to the intersection of 129th Street and Indianapolis Blvd. Any oil leaving the dike area to the south would be deflected along the Cline Avenue road embankment. Oil would tend to flow along the embankment either southeast toward the railroad right-of-way or northwest to Indianapolis Blvd.

South Field Annex

- The South Field Annex is located south of Cline Avenue in the area described above. This portion of the field is used to store, ship, and receive gasoline, distillate and base blending components. Its primary function is to supply product to pipelines, ships, rail, and truck carriers. The Annex also contains four butane storage spheres. Oil exiting the dike walls to the north, would be deflected in a westerly direction by the Cline Avenue road embankment, to Indianapolis Blvd. or east into the railroad right-of-way. A catastrophic tank failure to the east and/or south would cause oil to pond in the vacant area between the tank dikes and

4.1 DIKED STORAGE AREA DRAINAGE SYSTEMS (Cont'd)

South Field Annex (Cont'd)

Riley Road. Eventually the oil would flow into the Riley Road storm sewer which flows southeast to a pumping station at the canal which pumps storm water and sanitary waste to the East Chicago Waste Water Treatment Plant. This pump station has an overflow to the canal. If the volume of oil discharged to Riley Road was greater than the sewers could drain, oil would flow toward the Indianapolis Blvd. sewers at the intersection of Riley Road and Indianapolis Blvd. Any oil escaping from the dikes to the west would enter the Indianapolis Blvd. storm sewers and subsequently flow toward the canal.

- Four tanks located at the Boat Docks are used to store "Black Oils" such as asphalt, gas oil, and decanted oil. These tanks are used to store product for shipment by barge or intermediates for return to the Facility for further processing. Two ballast water tanks at the Boat Docks are used to store oily water from area sumps, dirty ballast water from vessels, and oily water from compartment clean outs. A 250 gallon diesel fuel tank for fueling the dock crane is located just west of the Boat Dock office. A catastrophic failure of this tank would result in flow overland into the canal. In general any oil escaping from the tank dikes will flow overland to the canal from this area. Additionally, oil could get into the Boat Dock sanitary sewer manholes which would flow to Riley Road then to the lift station at Canal Street where it would be pumped to the East Chicago Treatment Plant. The area to the north of the tanks is relatively flat and the dikes themselves form somewhat of a barrier to flow; it could be expected that some ponding will occur in this area if the discharge is to the north.

Indiana Tank Field

- A spill breaching the dike walls of the Indiana Tank Field to the north would send oil flowing into the area occupied by the BP Marketing C Station Terminal and its loading racks. This area has numerous drains that flow to the process sewer. If the quantity of oil was greater than the drains could handle, the oil would begin to flow into Indianapolis Blvd. and its storm sewer. Control measures in the Indianapolis Blvd. storm sewers are addressed in the Facility Response Plan. A catastrophic tank failure to the east would result in oil flowing into Indianapolis Blvd. storm sewers and subsequently into the canal. The southeast corner of this tank field contains a large landscaping berm that would prevent oil from a catastrophic failure from immediately entering the intersection of Indianapolis Blvd. and 129th Street. Oil that flowed south and west along this berm would be intercepted by drainage to the 129th Street storm sewers eventually flowing into the Indianapolis Blvd. storm sewers. Oil breaching the dikes to the south would flow into 129th Street and flow east to the 129th Street storm sewers. If the volume of oil entering the storm sewer was greater than the sewer capacity, the oil may continue overland east to the Indianapolis Blvd. and enter its storm sewers which eventually empty into the canal. Oil from a spill to the west of the tank field would result in oil ponding in the CSX Railroad right-of-way and potentially entering a residential area of Whiting adjacent to the tank field.

4.1 DIKED STORAGE AREA DRAINAGE SYSTEMS (Cont'd)

Asphalt Tank Area

- The asphalt tank area within the Facility is surrounded on the north by the Maintenance Shops and its associated parking area, to the east by Standard Avenue, to the south by a pipe alley, No. 12 Pipe Still and VRU 300, and on the west by open areas containing loading racks and No. 2 Treating Plant. Due to the high viscosity of asphalt and the need to keep the product at elevated temperatures, it is unlikely that any tank failure could result in a discharge off Facility property.

Back-up Fire Water Fuel Tank

- The Facility's Fire Department maintains a small emergency diesel fuel tank, south of Cal Nitro at the Indiana Harbor Ship canal. This tank provides fuel for the back-up fire water pump. The total capacity of the tank is 1,600 gallons. This tank is diked, however, should a catastrophic failure occur some product could get to the canal due to the tanks proximity to the canal. Any product in the canal would be contained to the east by the permanent boom across the canal at the Indianapolis Blvd. bridge or the west by a roadway across the canal. There is a locked fence providing protection against spills due to vandalism. The key to this lock is kept at the Facility's fire station.

- Flapper-type drain valves are not used to drain diked areas.

- Water is visually inspected for product and discharged only if no product sheen is visible.

- The preferred method of removal of accumulated stormwater is by natural evaporation providing that the accumulation does not damage the equipment/ structures or inhibit operations conducted within the containment area.

- Stormwater which does accumulate within the diked area, and does not dissipate naturally, is pumped out in accordance with the stormwater drainage procedures.

- Facility drainage does not flow directly into an open watercourse.

- Facility personnel maintain a high level of training and awareness on the Facility's Facility Response Plan (FRP) and are capable of implementing this contingency plan in the event of a discharge.

4.2 UNDIKED AREA DRAINAGE

Drainage from undiked areas is controlled as follows (Refer to Figures A-3 and A-4):

- The Facility drainage system is designed in a manner that will enable undiked areas with the potential for discharge to flow into drains and/or ditches equipped with a diversion system designed to retain oil in the Facility.

- Drainage from undiked areas within the Facility generally flows to the process sewer system.

4.2 UNDIKED AREA DRAINAGE (Cont'd)

- Each unit within the Facility has Inside Battery Limits (ISBL) process sewer drainage which ties into the Outside Battery Limits (OSBL) process sewers. OSBL process sewer lines from the various units eventually tie into trunk sewers. There are six main trunk sewer lines in the Facility. These common lines then tie into one main line which directs process sewer water to the Lakefront WWTP Facility for treatment as described in the Facility Response Plan. Within the Facility, oil is recovered at either a dewatering station or at unit oil/water separators. At the Lakefront, oil is recovered at No. 7 Separator. All recovered oil is routed back to the Facility for reprocessing.

- Plant drainage is engineered as above. The final discharge of all in-plant ditches is equipped with a diversion system that could, in the event of an uncontrolled spill, return the oil to the Facility.

- All Facility piping is located in areas that drain to diked areas or either of the two (2) process sewers.

- Drainage of stormwater from other undiked areas (non-storage) of the Facility is not controlled due to its origination from non-spill potential areas. Oil that may get into these areas would be cleaned up immediately and not allowed to drain off the property.

- The risk of leaks originating from piping is low since it is observed frequently enough to detect excessive corrosion, defective pipe supports, or other anomalies which could compromise the integrity of the pipe.

- In the event that a spill did originate from undiked piping, the Facility would immediately activate its Facility Response Plan to mitigate the spill before leaving the property.

- Four (4) public stormwater sewers in the immediate area of the Facility discharge into either the Indiana Harbor Canal or the Lake George Branch of the Indiana Harbor Canal. A fifth combined sanitary/storm sewer for the City of Whiting is also immediately adjacent to the Facility. It ultimately discharges to the Hammond Sanitary District treatment works. These sewers are checked at various locations by the Facility Environmental Technicians. Many of the sewers have sumps, weirs, and trap points to capture small amounts of oil that might get into the systems. If oil is discovered in any of these locations, it is vacuumed out and the source of the oil is investigated.

4.3 STORMWATER DRAINAGE PROCEDURES

The procedure for supervising the drainage of stormwater from secondary containment into a storm drain or an open watercourse is as follows:

4.2 UNDIKED AREA DRAINAGE (Cont'd)

- No dike drains in the Facility discharge directly into a water course. Water drained from most tank dikes eventually enters the process sewer either directly or after passing through a dewatering device to collect and recover any oil that might be contaminating the stormwater from the dike. Water from the J&L Tank Field dikes is drained into the Outfall #003 system. Valves controlling dike drainage are non-flapper type drain valves that must be manually opened and closed.

- The conditions under which stormwater is drained from the dike, the open or closed position of the valves, and whether the sumps in the tank fields are running or not, is governed by a number of different factors in the tank fields. Each tank field has a set of Standard Operating Instructions (SOIs) that governs the draining of stormwater from the dikes.

- Facility drainage flows into a facility wastewater treatment plant.

4.4 EFFLUENT TREATMENT FACILITIES

- There are three main structures at the Lakefront Wastewater Treatment Plant (WWTP) that are used to treat wastewater for removal of oil. (Refer to Figures A-3 and A-4.) The first is No. 7 Separator which makes the initial oil water separation on process sewer influent into the treatment plant. Oil that is recovered at this API type separator is pumped to tanks at the WWTP and later pumped to the DGO system to be re-refined. The second structure at the treatment plant to remove oil from the process sewer and prevent it from being discharged to Lake Michigan is the stormwater surge tanks. These tanks are located downstream of No. 7 Separator and are used to prevent stormwater surges in the treatment plant. A surge of stormwater could cause by-passing of various units in the plant and the direct discharge of process water to the lake. These tanks are used to retain large quantities of fluids that enter the process sewer by diverting the sewer flow to the tanks. The third structure is the Diffused Air Flotation Unit (DAF) that removes finely divided oil particles, not removed at No. 7 Separator, from the effluent.

- The once-through cooling water system passes through a large separator at the WWTP prior to discharging into Lake Michigan. If oil is detected in the once-through cooling water system, the Facility personnel act to locate the source of the oil. Steps can then be taken to correct the problem at its source.

- Sorbent sheets stored at the WWTP can be used in the Lakefront WWTP's once-through cooling water separator to capture oil sheen from the surface. More sorbent sheets are applied as needed depending upon the appearance of the separator surface. If oil is being lost to the once-through, non-contact cooling water, vacuum trucks can be employed upstream at two catchment points and at the separator to recover oil. Additional observation points are being identified to monitor oil in the Once Through Cooling Water System. These points will provide early detection of any oil and allows the Facility personnel additional time to prevent the spill from reaching the lake. The Facility is also performing an assessment of the once-through system to identify and evaluate options to prevent oil from entering the lake. Operating procedures and training materials are being reviewed to emphasize

4.4 EFFLUENT TREATMENT FACILITIES (Cont'd)

importance of preventing oil from entering the Once Through Cooling Water System. Containment boom is stored on shore at Outfalls 001 and 002.

- Critical lift stations at the WWTP are equipped with a back-up electrical system. This minimizes the possibility of releasing oil to the lake as a result of an electrical failure resulting in the bypassing of these lift stations. However, oil that has been accidentally released to the lake as a result of the bypassing of a section of the treating Facility must be contained and recovered to the extent practical.

5.0 BULK STORAGE CONTAINERS

5.1 CONTAINER DESIGN AND CONSTRUCTION

Aboveground Bulk Storage Containers

Note: According to the EPA, aboveground bulk storage containers may include but are not limited to drums, totes and range from horizontal additive tanks up to large aboveground storage tanks. A bulk storage container only has to be 55 gallons or greater and may be either aboveground, partially buried, bunkered, or completely buried. For the purpose of this section "large" aboveground bulk storage containers refer to bulk product storage tanks (i.e. gasoline, diesel, jet A, etc.). Oil filled electrical, operating, or manufacturing equipment is not a bulk storage container.

The Facility's bulk oil and oil products storage containers have the following design characteristics, materials of construction, and fail-safe engineering features:

- The product storage containers are constructed of a material that is compatible with the oil and oil products stored and the conditions of storage (including pressure and temperature).

- Most large aboveground bulk product storage containers in tank fields are provided with gauges which send a signal to a centralized Tank Field Control Room. These containers are provided with a high level alarm that sounds in the control room alerting operators to cease filling operations to avoid overfilling.

- Direct audible communications between the operator and the pumping station is provided through the means of two-way radios. Oil Movement Division has Standard Operating Instructions concerning tank working heights and level alarms. The working height of a tank is set at four feet below the overflow point of a particular tank. High level alarms are set one foot below the working height of the tank and should provide at least thirty minutes of response time before the next alarm, the high high level alarm. The high high level alarm is set at the actual working height of the tank and the critical alarm is set one foot below the overflow point of the tank and usually represents approximately thirty minutes in which to stop the flow into the tank.

- Tank gauges in the tank fields are tied into CRT readouts that are accessed in the tank field control rooms. The control room for each of the tank field retains a report each shift which gives the status of each of the storage tanks within that field. This report indicates whether the tank is being filled, emptied, or inactive. These gauges are checked regularly by Oil Movement operators to ensure proper operation and work orders are written to make repairs if there is a significant deviation between the readings. OMD Maintenance is promptly notified to initiate repair. Tanks are also regularly taped for confirmation of mechanical gage level. In areas of the Facility where tank gauges are not remotely connected to control rooms operations personnel are required to manually check the gauges during product receipts. The Oil Movement Division has Standard Operating Instructions covering the inspection of tank gauges during product receipts.

- Visible oil leaks which result in a loss of product from containers sufficiently large to cause the accumulation of product in diked areas will be promptly corrected and removed.

5.1 CONTAINER DESIGN AND CONSTRUCTION (Cont'd)

Aboveground Bulk Storage Containers (Cont'd)

- Large aboveground bulk product storage containers are operated within "Safe Fill" levels positioned below the operating limits of the tank.

- Large aboveground bulk storage container bottoms and associated buried appurtenances are cathodically protected.

Secondary Containment

The secondary containment system provided for the bulk oil and oil product storage containers has the following design and construction characteristics:

- Containment or diversionary structures or equipment to prevent oil from reaching navigable waters are practicable.

- All bulk storage tank installations are constructed so that a secondary means of containment is provided for the entire contents of the largest single container plus sufficient freeboard to allow for precipitation. Supporting documentation for dike volumes are included in Appendix C. Although the SPCC rule does not specify a minimal precipitation allowance, the historic 25 year / 24 hour rainfall event was used as a baseline freeboard allowance to determine adequacy. Those dikes that have less than 10% of the largest tank's contents are supplemented by the WWTP.

- The containment area(s) is constructed of compacted earthen material with earthen floor and concrete. Three dike walls in the Indiana tank farm are designed with metal gates that serve to cover vehicle access points. These gates are designed to slide into a grooved slot and are secured by anchor bolts.

- Due to the sandy nature of the refinery's soil types, containment areas have some vertical permeability that may preclude a spill from being completely cleaned up before permeating the ground. However, containment areas are capable of maintaining a discharge within the boundaries of the Facility provided that a discharge is timely detected and clean up operations begin immediately after discovery of the discharge. This determination has been made based on the refinery's knowledge of the underlying aquifer, its active remediation project to contain and recovery contaminated groundwater, and the Indiana's Department of Environmental Management (IDEM) determination that migration of contaminated groundwater is under control.

- The Facility has a strong tank integrity program which significantly increases the chances of detecting corrosion or anomalies in the tank shell before it becomes compromised. More detail on the tank integrity program is provided later in this section.

5.1 CONTAINER DESIGN AND CONSTRUCTION (Cont'd)

Secondary Containment (Cont'd)

- Discharges would be detected during daily visual inspections and while conducting normal operations. In the event of a discharge, response and recovery operations, including use of contract resources, would commence immediately upon detection as described in the Facility Response Plan.

- The Facility is equipped with a series of monitoring wells and a groundwater containment system. The monitoring wells are utilized for monitoring the potential impact or movement of a discharge below the surface and hence provides an additional means of detecting discharges. The groundwater containment system provides an additional means of keeping discharged product within the boundaries of the Facility until clean up occurs. This system also provides the additional response capability necessary for those underground facilities with no line of site inspection capability (tank bottoms, underground piping, buried containers, etc.).

- Part of the product recovery system includes a positive barrier (slurry walls and sheet pile cutoff walls) that is positioned in a location that impedes the flow of groundwater to surface water at the Lakefront, Calumet Avenue ditch, Lake George canal, and dock area.

- Remediation systems control the groundwater flow and creates an inward gradient around the perimeter of the plant where groundwater is "known" to be contaminated.

- The retrofit installation of containment area liners is not practicable. As referenced in API Publication Number 341, liner systems are not the most efficient and most reliable means of protecting the environment. The utilization of the tank maintenance and early detection systems described elsewhere in this plan are more effective.

- There is a potential for groundwater discharge to the surface water body southwest of Cline Avenue along the Calumet Avenue drainage ditch and west of J&L area. The potential is minimized by the installation of geomembrane, french drain system and sheet piles.

- In general, Remediation systems which would preclude groundwater contamination from discharging to surface water bodies around the site include:

  Lake George Canal:

  - J&L J-141 A&B Wellpoint System
  - Cat Pond Wellpoint System Extension
  - Sheet Pile Cutoff Wall
  - Belt FPH Skimmers

  Turning Basin:

  - West Ditch French Drain System

5.1 CONTAINER DESIGN AND CONSTRUCTION (Cont'd)

Secondary Containment (Cont'd)

Dock Area:

- Dock Area French Drain
- Dock Area Recovery Well (BDP023)
- J-164 Wellpoint System
- Bulkhead Area

Calumet Avenue Ditch:

- Cline Ave. Cloverleaf French Drain System
- Cline Ave. Cloverleaf Sheet Pile
- J-162 Wellpoint System

Lake Michigan:

- West French Drain
- East French Drain
- Slurry Walls
- BSRW-1 Recovery Well
- Stormwater Surge Basin Dewatering Wells
- Lakefront J-163 Wellpoint System
- Lakefront Slurry Wall
- Sheet Pile Cutoff Walls

- Discharge of groundwater from BP Whiting Facility property into surface water is considered insignificant at the time. BP Facility has installed hydraulic control systems of groundwater extraction or positive barriers at areas of known groundwater contamination (generally, free phase hydrocarbons) where a potential for discharge into surface water exists. The known contaminated groundwater is known from semi-annual measurements of fluids in over 1,000 monitoring wells located on and off-site. Specific hydraulic control systems located at surface water discharge points include:

  - Lakefront East and West French Drains;
  - Lakefront Slurry Wall;
  - Lakefront Sheet Piling;
  - Lakefront J-163 Wellpoint System;
  - Cline Ave. Cloverleaf Sheet Pile;
  - Cline Ave. Cloverleaf French Drain System;
  - J&L J-141 A&B Wellpoint System;
  - J&L Lake George Canal Sheet Pile;
  - J&L West Ditch French Drain System;
  - Dock Area System 1 Well;
  - Dock Area French Drain System; and
  - Dock Area Sheet Pile.

5.1 CONTAINER DESIGN AND CONSTRUCTION (Cont'd)

Secondary Containment (Cont'd)

- Currently, there are 85 systems that are controlling the groundwater flow, recovering and remediating LNAPL. Quarterly/semi-annual fluid levels are routinely collected and the data is converted to product potentiomentric and plume maps.

5.2 COMPLETELY AND PARTIALLY BURIED OR BUNKERED TANKS

- The Facility does not have completely buried metallic storage tanks that were installed on or after January 10, 1974 and are not covered by 40 CFR Part 280 or 281.

- The Facility does not have partially buried or bunkered metallic tanks.

5.3 MOBILE OR PORTABLE OIL STORAGE CONTAINERS

- Mobile or portable oil storage containers are located at the Facility.

- A secondary means of containment, such as dikes or catchment basins, is provided for the largest single compartment or container plus sufficient freeboard for precipitation. Drums, when transported away from accumulation and/or storage areas, will be positioned such that drainage will flow to the Refinery's process sewers. In situations where this is not possible, the drums will be stored in portable storage basins when not in use.

5.4 INTERNAL HEATING COILS

- Some storage tanks are equipped with internal heating coils. Some heating coils utilized are oil-based heat transfer fluid (motor oil with stabilizer additives), while some utilize 100# steam. In both cases, a coil leak would force the heat carrying fluid into the tank, due to the differential pressure between the coil fluid (high pressure) and the tank contents (low pressure). Tanks utilizing steam heat discharge condensate into traps that drain into the respective tank dikes.

6.0 TRANSFER OPERATIONS, PUMPING, AND IN-PLANT PROCESS

6.1 BURIED PIPING INSTALLATIONS

- When practical, projects are engineered to install pipelines aboveground, minimizing underground lines in the Facility. However, in cases where underground lines are applicable, such as under roadways, they are sleeved, cathodically protected and/or wrapped for corrosion protection.

- Oil Movements has an ongoing program for coating and wrapping older piping that are exposed when lines are dug up for modification or repair. Exposed lines are also visually inspected and ultrasonically tested for corrosion, deterioration, and damage and are replaced or repaired as needed.

- Oil Movements also has an ongoing line raising road crossing project pursuant to Agreed Order with Indiana Department of Environmental Management in the Facility, Tank Fields, and recently completed at the Marine Docks.

- Where practical, lines are being brought out of the ground and put in overhead pipe racks.

- All formal records are kept in the Inspection Department's files.

6.2 CATHODIC PROTECTION OF UNDERGROUND PIPING

- There are lines located outside of the Facility that are cathodically protected. These lines include the LPG lines from the Facility, lines owned and operated by BP Pipeline Company, and nitrogen and oxygen pipelines from Prax Air.

- Underground lines at the Marine Docks Facility are also cathodically protected.

- The Facility does not typically install buried piping except in road crossings and through dike walls. Buried piping installed or replaced after August 16, 2002, is:

    - Protectively wrapped and coated.
    - Cathodically protected where technically feasible and judged appropriate based on engineering considerations including soil conditions. The need to install cathodic protection for buried piping is covered in the piping change check list used during MOC. Decisions made not to install cathodic protection are documented on the checklist maintained at the specific unit.

6.3 OUT-OF-SERVICE PIPING

- Out of service piping Facility connections are capped or blank-flanged and marked when the piping is not in service or in standby service for extended periods. This is done in accordance with the Facility Manual of Safety Procedures (Procedures A-7).

6.4 VEHICLE WARNING PROCEDURES

The procedures for warning vehicles entering the Facility to avoid damaging aboveground piping or other equipment are as follows:

- Vehicular traffic granted entry into the Facility is warned by appropriate signs to be sure that the vehicle will not endanger aboveground piping.
- Speed signs are posted at the entrance of the Facility and where appropriate throughout the Facility.
- Bumper guards are provided in critical vehicle access areas to protect aboveground piping and/or other oil transfer operations.
- If necessary, large vehicles in the Facility are verbally advised of specific routes which must be taken inside the Facility to avoid damaging overhead lines. In particularly vulnerable spots, signs have been posted which indicate the clearance available under the overhead lines.

7.0 TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK

7.1 FACILITY OPERATIONS

The Facility's Tank Car and Tank Truck Loading/Unloading operations are conducted as follows:

- Truck loading/unloading operations are conducted at this Facility.
- Tank car (rail) operations are conducted at this Facility.
- Loading/unloading procedures meet the minimum requirements and regulations established by the Department of Transportation.

7.2 LOADING/UNLOADING RACK CONTAINMENT SYSTEM

Tank Truck Loading/Unloading Racks

The loading/unloading rack areas are designed and operated as follows:

Marketing C Station Terminal

- The Marketing C Station Terminal Loading Racks consists of eight truck loading bays. Bay 1 is out of service, and piping is flanged off. Bays 2 through 4 are for loading gasoline products, and Bays 5 through 8 are for loading diesel products. A maximum of seven trucks, with a maximum capacity of 10,000 gallons each, can load using two load arms each, at a maximum transfer rate of 600 gal/min for each load arm, which equals an overall maximum transfer rate of 8,400 gal/min or 12,000 bbl/hr.
- The area around the C Station loading racks is well drained to the process sewers. Asphalt berms have been installed at each entrance way to aid in keeping any spill from migrating off-site to the Indianapolis Blvd. storm sewer. The drains directly under each loading spot drain to the west sump which discharges to the Indiana Tank Field Casper dewatering system. Area drains in the north and west sectors of the Facility drain to the central sump which discharges into the Indiana Tank Field Casper dewatering system. Area drains in the south and east sectors of the Facility drain to the east sump which discharges to the Indiana Tank Field Casper dewatering system. Oil recovered in the Indiana Tank Field Casper dewatering system is pumped to dirty gas oil. The water gravity drains to the process sewer.
- If a spill occurred, it is doubtful that oil would migrate off-site to the Indianapolis Blvd. storm sewer or the CSX right-of-way. In the event of a catastrophic failure of a tank truck or line leading to the rack, some oil may flow toward Indianapolis Blvd., however, the concrete wall along Indianapolis Blvd. would inhibit the flow allowing time for response to capture excess oil flowing onto the street. All lines to the loading rack have been raised above grade to minimize the chance of leakage due to corrosion.

7.2 LOADING/UNLOADING RACK CONTAINMENT SYSTEM (Cont'd)

Rail Car Loading/Unloading Racks

- The loading/unloading rack areas are designed and operated as follows:

Propylene

- Loading racks located at Propylene shipping can load a maximum of 12 rail tank cars, at a maximum capacity rate of 500 bbl.hr., at one time with a maximum capacity of 34,000 gallons.

- Propylene is a gas at normal atmospheric temperatures and pressures, therefore a spill of this material would not migrate to navigable waters.

7.3 WARNING SYSTEMS

The Facility's loading/unloading areas are equipped with the following warning systems which are designed to prevent vehicular departure before complete disconnect of flexible or fixed transfer lines:

- The loading racks at the Marketing "C" Terminal are equipped with a Scully Overfill System at each loading spot which will shut down the loading operation at that spot before an overfill occurs. These racks are also equipped with a deadman switch at the driver's loading station, this deadman requires that a driver be present while the truck is being loaded. The driver must also pre-set the number of gallons to be loaded into the truck on the meter before beginning loading. Should an overfill occur during loading, the driver can release the deadman or hit the emergency switch and shut off the pumps.

- To prevent a truck from moving away from the Marketing Terminal prior to disconnect, the hose hookup is arranged such that when the nozzle is attached to the truck, a switch activates a lock on the truck's air brakes. The truck can only be moved when the hose is disconnected and the air brakes are unlocked. Trucks are bottom filled by volume and drivers must obtain permission to load. A high level sensor system also exists at the Facility to prevent spills and no truck can load without vapor controls.

- Railcars in the Facility are prevented from moving away from the loading rack prior to disconnecting by using derailers, chocks and handbrakes.

- When filling BP product into a tank car or truck, a transfer of custody occurs between the Facility and the designated hauler. Therefore, it is the hauler's responsibility to check all outlets for leaks. However, random checks are done by loading rack personnel at the racks and the guards at the Facility gates, to assure that tank truck and tank cars are not leaking when they leave the Facility.

7.4 LOADING/UNLOADING PROCEDURES

Prior to the filling and departure of any tank car or tank truck, the following are completed:

- Any sign of leakage is immediately repaired by truck drivers (tightening, adjusting, or replacing) to prevent liquid leakage while in transit.

8.0 SECURITY

Note: Detailed information on the security of this Facility is provided in the Facility Security Plan, separately maintained and is considered SSI and not duplicated herein.

8.1 FENCES AND ENTRANCE GATES

The security measures in place for the Facility perimeter include fences and gates as follows:

- The Facility is protected by a security system that is in effect 24 hours a day, 365 days a year. This security system consists of 14 Security Guards and 5 full time Captains. The two main Facility entrances are equipped with guard houses and are manned at all times. Guards allow only properly identified vehicles and those bearing an entrance pass issued by the main office to enter Facility property. There are approximately 25 gates in the Facility of which only 2 or 3 are opened as needed during the day shift. However, all gates are normally locked or guarded for monitoring during the off shifts. The Facility has a MTSA Facility Security Plan.

- All property dedicated to handling, processing, and storing oil is lighted and fenced. Starter controls on oil pumps are located within Facility property and are thus accessible only to authorized personnel. This minimizes the possibility of a spill occurring through acts of vandalism.

8.2 OIL AND OIL PRODUCT STORAGE CONTAINER VALVES

The security measures in place for the oil and oil product storage tank valves are as follows:

- Master flow and drain valves, as well as any other valves that will permit direct outward flow of any tank's contents to the surface, are securely locked in the closed position when in non-operating or non-standby status.

8.3 OIL AND OIL PRODUCT PUMP STARTER CONTROLS

The security measures in place for the oil and oil product pump starter controls are as follows:

- The starter controls on all pumps are not locked in the "off" position when in non-operating or non-standby service. However, the starter controls on all pumps are located at a site accessible only to authorized personnel.

8.4 PIPELINE CONNECTIONS

- When Facility piping is not in service or in standby service for an extended time, the loading/unloading connections are securely capped or blank flanged. This applies to piping that is emptied of its liquid content either by draining or by inert gas pressure.

8.5 LIGHTING

Facility lighting is designed and operated as follows:

- Lighting is adequate and commensurate with the operation and the type and location of the Facility.
- Lighting provides nighttime visibility for discovery of discharges by operating and non-operating (the general public, local police, etc.) personnel.
- Lighting helps prevent the probability of discharges occurring through acts of vandalism.

APPENDIX A

FACILITY SPECIFIC INFORMATION

AREA MAP

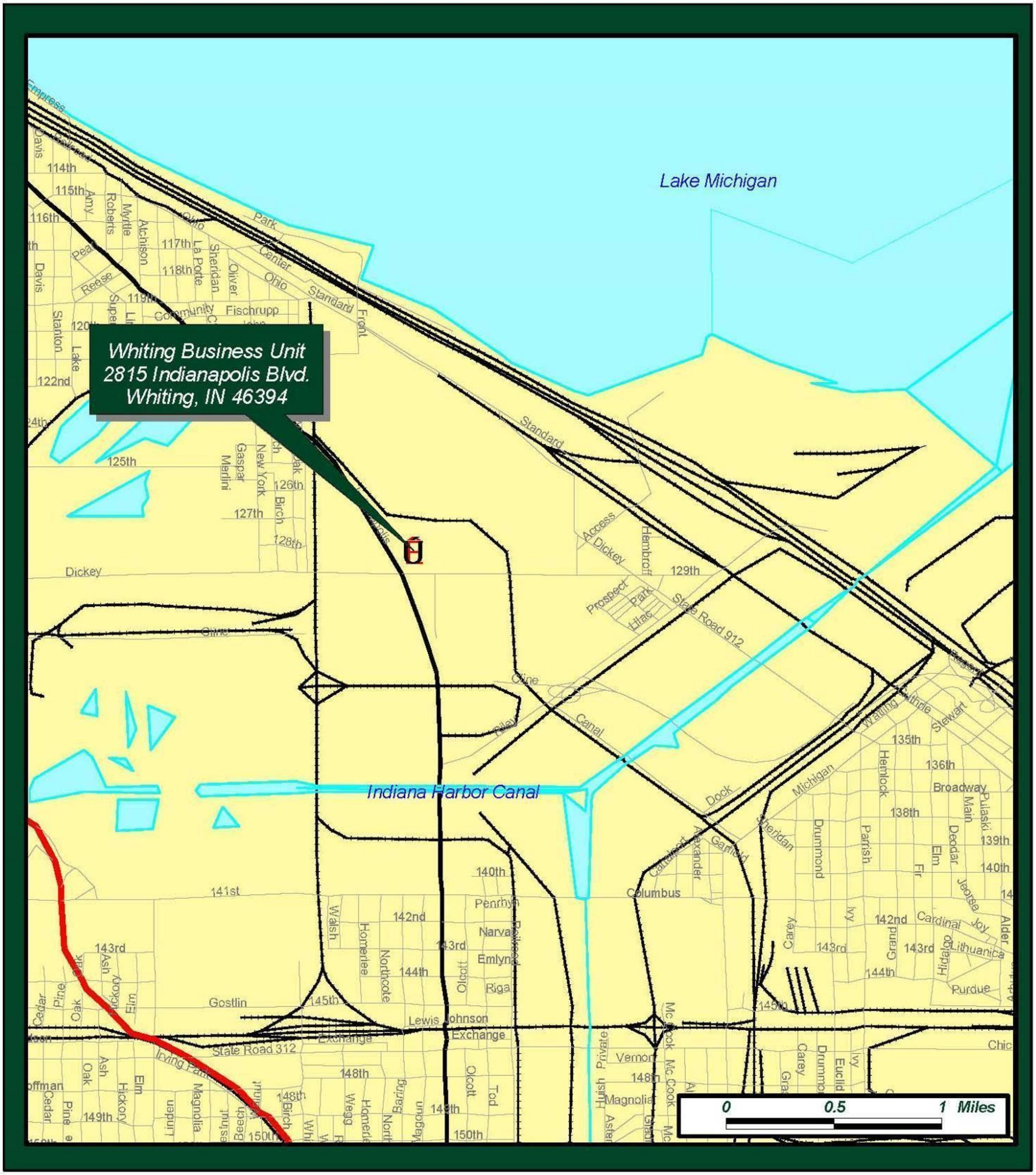
Whiting Business Unit
2815 Indianapolis Blvd.
Whiting, IN 46394
Lake Michigan
Indiana Harbor Canal
0 0.5 1 Miles

FIGURE A-2

FACILITY DIAGRAMS

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Exemption 4 & 7 (F)

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NOTIFY INFORMATION MANAGEMENT OF ALL CHANGES

FIGURE A-3

SITE PROCESS SEWER DIAGRAMS

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APPENDIX B

FORMS, REPORTS AND CHECKLISTS

Employee Detail Report

Employee ID:

Job Title:
Date Hire:
Date Achieved:
Department:
Position:
Shift:
Work Area:

Team Assignments	Assigned

Training History

Course	Title	Date	#	Hours	Grade	Score
SYSINT005	Learner					
NRGTRN135	DRIVER AWARENESS - ADVERSE WEATHER					
OPRFLT100	XATA TRAINING					
OPRSOP601	TRUCK LOADING					
OPRSOP621	TRUCK UNLOADING					
REGDOT112	DRIVER'S HANDBOOK					
REGOSH100	HAZARD COMMUNICATION/AWARENESS					
SYSINT006	BASIC COE3 TRAINING FOR DRIVERS					
OPRTRM202	Delivery Confirmation					
REGENV209	TOXIC SUBSTANCES CONTROL ACT (TSCA)					
NRGGEN001	ROOT CAUSE ANALYSIS TRAINING					
REGENV201	OPA-90 PLAN: SPILL RESPONSE DRILL/TABLETOP					
REGOSH107	Hazwoper Refresher					
BUSFLL003	FINANCIAL BASICS - Supervisory Essentials					
BUSFLL004	EMPLOYMENT LAW - Supervisory Essentials					
NRGSAF05	SAFETY STANDDOWN					
REG0SH104	HAZWOPER / QI / ICS - INITIAL					
SYSSAP124	EXCHANGES OVERVIEW					
SYSSAP127	INTRODUCTION TO CENTRA					
SYSSAP129	INTRODUCTION TO THE PROGRAM ONE BP LMS					
SYSSAP135	ORDERING WITH PAYKEY					
SYSSAP139	PROCUREMENT - OVERVIEW					
SYSSAP145	SUPPLY CHAIN FOUNDATIONAL DATA OVERVIEW					
SYSSAP146	TAS SET UP FOR EXCHANGES AND THROUGHPUTS					
SYSSAP149	USING THE OLQR TOOL					
SYSSAP150	SAP BASICS AND NAVIGATION					
NRGHLT007	FATIGUE MANAGEMENT					
SYSSAP144	SAP PAYKEY PROCESSING CBT					
REGENV201	OPA-90 PLAN: SPILL RESPONSE DRILL/TABLETOP					
NRGGEN003	MOC - MANAGEMENT OF CHANGE					
NRGSAF003	ASA - ADVANCED SAFETY AUDIT TRAINING					
NRGTRN132	DRIVER SAFETY AWARENESS					
REGOSH204	BLOODBORNE PATHOGENS					
REGOSH301	EMERGENCY, FIRE & HAZWOPER AWARENESS - REF					
REGOSH312	CONFINED SPACE					
REGOSH322	HOT WORK PROGRAM					
BUSFLL005	FLEET MANAGEMENT - Supervisory Essentials					
REGENV205	(SPCC) SPILL PREV. CONTROL & COUNTERMEASURES					
REGENV208	RCRA/HAZARDOUS WASTE					
NRGSAF003	ASA - ADVANCED SAFETY AUDIT TRAINING					
REGENV205	(SPCC) SPILL PREV. CONTROL & COUNTERMEASURES					

Employee Detail Report

Employee ID:

Job Title:
Date Hire:

Date Achieved:

Department:
Position:

Shift:

Work Area:

Team Assignments	Assigned

Training History

Course	Title	Date	#	Hours	Grade	Score
REGENV208	RCRA/HAZARDOUS WASTE					
REGOSH100	HAZARD COMMUNICATION/AWARENESS					
NRGTRN132	DRIVER SAFETY AWARENESS					
REGOSH302	FIRE EXTINGUISHER - HANDS ON TRAINING					
NRGGEN004	GETTING HSE RIGHT					
NRGTRN132	DRIVER SAFETY AWARENESS					
REGOSH301	EMERGENCY, FIRE & HAZWOPER AWARENESS - REF					
REGOSH305	FIRE PREVENTION					
REGOSH326	ACCESS TO EXPOSURE AND MEDICAL RECORDS					
NRGHLT008	ERGONOMICS - OFFICE					
NRGTRN132	DRIVER SAFETY AWARENESS					
REGOSH208	PERSONAL PROTECTIVE EQUIPMENT					
REGOSH344	SAFE MANUAL LIFTING					
REGOSH100	HAZARD COMMUNICATION/AWARENESS					
REGOSH204	BLOODBORNE PATHOGENS					
REGOSH301	EMERGENCY, FIRE & HAZWOPER AWARENESS - REF					
REGOSH100	HAZARD COMMUNICATION/AWARENESS					
REGOSH304	FIRE EXTINGUISHER AWARENESS TRAINING					

BRITTLE FRACTURE EVALUATION
(Sample Log)

Tank / Container ID: ______________________________

- ❑ Field-constructed aboveground bulk storage container.
- ❑ Repair: ______________________________ or,
- ❑ Alteration: ______________________________ or,
- ❑ Reconstruction: ______________________________.
- ❑ Alterations, repairs or reconstruction meets API 653 (Tank Inspection, Repair, Alteration and Reconstruction).
  - ❑ Continue Use: ______________________________
- ❑ Change of service that might affect the risk of a discharge: ____________________

1. ❑ Tank (container) meets API 650 (Welded Steel Tanks for Oil Storage – 7th Edition or later) and the tank continues to operate in ❑ same service or ❑ equivalent or less severe service.
   - ❑ Continue Use: ______________________________

OR

2. ❑ Tank (container) does not meet API 650 or other equivalent standard:
   - ❑ Prior hydro demonstrates fitness for continued service.
     - ❑ Continue Use: ______________________________
   - ❑ No prior hydrostatic test. **(Go to Step 3.)**
     - ❑ Further evaluation or appropriate action: ____________________

OR

3. ❑ Alteration, repairs or reconstruction does not meet API 653.
   - ❑ Tank thickness ≤ 0.5 inch: ______________________________
     - ❑ Continue Use: ______________________________
     - ❑ Further evaluation or appropriate action: ____________________

   OR IF NOT,

   - ❑ Tank operates at metal temperature above 60°F:____________________
     - ❑ Continue Use: ______________________________
     - ❑ Further evaluation or appropriate action: ____________________

   OR IF NOT,

   - ❑ Membrane stress below 7 KSI:______________________________
     - ❑ Continue Use: ______________________________
     - ❑ Further evaluation or appropriate action: ____________________

______________________________ ____________________

Inspector/Supervisor Date

TANK INSPECTION REPORTS

§112.4 Submittal of Information to Regional Administrator for Qualified Discharge(s)

In the event of a reportable discharge or discharges, this page can be utilized to provide official notification to the Regional Administrator. If the Facility has had a discharge or discharges, which meet one of the following two criteria, then this report must be submitted to the Regional Administrator within 60 days. (Check as appropriate)

- ☐ This Facility has experienced a reportable spill as referenced in 40 CFR Part 112.1(b) of 1,000 gallons or more.
- ☐ This Facility has experienced two (2) reportable spills (as referenced in 40 CFR Part 112.1(b) of greater than 42 gallons each within a 12-month period.

Facility Name and Location: ______________________________

____

____

Facility Contact Person (Name, address/phone number): ______________________________

____

____

Facility maximum storage or handling capacity: ______________________________

____

____

Facility normal daily throughput: ______________________________

____

____

Describe the corrective action and countermeasures taken (include description of equipment repairs and replacements): ______________________________

____

____

Describe the Facility (maps, flow diagrams and topographical maps attached as necessary):

____

Describe the cause of discharge (as referenced in 40 CFR Part 112.1(b)) including failure analysis of the system is:______________________________

____

____

Describe the preventative measures taken, or contemplated to be taken, to minimize the possibility of recurrence: ______________________________

____

____

Other pertinent information: ______________________________

____

- A copy of this report is also to be sent to the appropriate state agency in charge of oil pollution control activities.

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CROSS REFERENCE

U.S. EPA – SPCC
40 CFR § 112.3,5,7,8
CROSS REFERENCE

40 CFR § 112	BRIEF DESCRIPTION	SECTION
112.3	Requirement to prepare and implement a Spill Prevention Control and Countermeasure Plan	-----
(a,b,c)	Owners or operators must prepare and implement a Plan…	§1.5
(d)	A licensed Professional Engineer must review and certify a Plan for it to be effective...	PE Certification Page
(e)	Maintain a complete copy of the Plan at the facility if the facility is normally attended at least 4 hours per day, or at the nearest field office**...**	§1.3
112.4	Amendment of Spill Prevention Control and Countermeasures Plan by Regional Administrator	-----
(a,c,d,e)	The Facility will amend the Plan..	§1.4, 1.5
112.5	Amendment of Spill Prevention Control and Countermeasures Plan by owners or operators	-----
(a)	Amend the SPCC ...when there is a change in facility design, construction, operation or maintenance which materially affects the facility's potential for the discharge of oil...	§1.4
(b)	...complete a review and evaluation of the SPCC at least once every five years... amend the SPCC within six months of the review**...**implement within six months of preparation of any amendment.	§1.4
(c)	Have a Professional Engineer certify any technical amendment…	§1.4
112.7	Guidelines for the preparation and implementation of a Spill Prevention Control and Countermeasures Plan	-----
-----	…must prepare a Plan…have full approval of management…in writing.	Management Approval Page, Entire Plan
-----	If the plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, these items should be discussed in separate paragraphs, and the details of installation and operational start-up should be explained separately.	-----
-----	…follow the sequence specified (or cross-reference)…	Cross Reference
(a)(2)	Comply with all applicable requirements in this part… [or] state reasons for non-conformance … and describe alternate methods…	-----
(a)3)	Describe … physical layout … and include diagram ….	§ 1.1, App. A
(a)(3)(i)	… [address in your Plan] .. the type of oil in each container and its … capacity …	App. A
(a)(3)(ii)	… discharge prevention measures including routine handling of products …	§ 2.6
(a)(3)(iii)	...Drainage or discharge controls … and procedures for control of a discharge …	§ 4.0
(a)(3)(iv)	Countermeasures for discharge discovery, response, and cleanup (both … facility's … and contractor ….)	§ 2.1
(a)(3)(v)	Methods of disposal of recovered materials …	§ 2.5
(a)(3)(vi)	Contact list and phone numbers …	§ 2.2, 2.3 Fig. 2.1
(a)(4)	Relate information … [on a discharge] …	Fig. 2.2
(a)(5)	Organize portions of the Plan … that will make them readily usable….	Section Dividers
(b)	Where experience indicates a reasonable potential for equipment failure ... include in your Plan a prediction of the direction, rate of flow, and total quantity of oil... .	App. A

U.S. EPA - SPCC
40 CFR § 112.3,5,7,8
CROSS REFERENCE (Cont'd)

40 CFR § 112	BRIEF DESCRIPTION	SECTION
(c)(1)	Onshore facilities.	-----
(c)(1)(i)	Dikes, berms or retaining walls sufficiently impervious to contain spilled oil	§ 4.1, 4.2, 4.3, 5.1, App A
(c)(1)(ii)	Curbing or drip pans	§ 4.1, 4.2, 4.3, 5.1, App A
(c)(1)(iii)	Sumps and collection systems	§ 4.1, 4.2, 4.3, 5.1, App A
(c)(1)(iv)	Culverting, gutters or other drainage systems	§ 4.1, 4.2, 4.3, 5.1, App A
(c)(1)(v)	Weirs, booms or other barriers	N/A
(c)(1)(vi)	Spill diversion ponds	N/A
(c)(1)(vii)	Retention ponds	N/A
(c)(1)(viii)	Sorbent materials	4.4
(c)(2)	Offshore Facilities.	-----
(c)(2)(i)	Curbing, drip pans	N/A
(c)(2)(ii)	Sumps and collection systems	N/A
(d)	If you determine that the installation of structures or equipment listed in paragraphs (c) and (h)(1) of this section…is not practicable…clearly explain in your Plan…and provide…	§ 1.7
(d)(1)	*A strong oil spill contingency plan following...40 CFR 109.*	Entire Plan
(d)(2)	A written commitment of manpower, equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged.	-----
(e)	*Inspections and records*	-----
	...in accordance with written procedures that you or the certifying engineer develop…with the SPCC Plan for a period of three years.	§ 3.2
(f)	*Personnel, training and spill prevention procedures*	-----
(f)(1)	...train your oil-handling personnel in the operation and maintenance of equipment to prevent the discharges...	§ 3.1
(f)(2)	Designate a person…accountable for oil spill prevention...	Management Approval Page
(f)(3)	Schedule and conduct spill prevention briefings...highlight and describe known spill discharges…or failures, malfunctioning components, and recently developed precautionary measures.	§ 3.1
(g)	*Security (excluding oil production facilities).* Describe in your Plan how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; and address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges.	§ 8.0
(h)	*Facility tank car and tank truck loading/unloading rack*	-----
(h)(1)	Where loading/unloading rack drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system… …design any containment system to hold at least maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.	§ 7.2
(h)(2)	Provide an interlocked warning light or physical barrier system, warning signs, wheel chokes, or vehicle break to prevent vehicular departure before complete disconnect of flexible or fixed oil transfer lines.	§ 7.3

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40 CFR § 112.3,5,7,8
CROSS REFERENCE (Cont'd)

40 CFR § 112	BRIEF DESCRIPTION	SECTION
(h)(3)	Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles should be closely examined for leakage, and if necessary, that they are tightened, adjusted, or replaced to prevent liquid leakage while in transit.	§ 7.4
(i)	If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or failure due to brittle fracture…evaluate the container for risk…	§ 3.2
(j)	In addition...include a complete discussion of conformance with applicable requirements…or any more stringent, with State rules, regulations and guidelines.	§ 1.6
(k)	*Qualified Oil-filled Operational Equipment* The owner or operator of a facility with oil-filled operational equipment that mees the qualification criteria…may choose to implement for this qualified oil-filled operational equipment the alternate requirements…in lieu of general secondary containment required in paragraph (c) of this section.	-----
(k)(1)	*Qualification Criteria – Reportable Discharge History…no single discharge as described in 112.1(b) from any oil-filled operational equipment exceeding 1,000 U.S. gallons or no two discharges…from any oil-filled operational equipment each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan certification date, or since becoming subject to this part…*	See FRP for Reportable Spill History
(k)(2)	*Alternative Requirements to General Secondary Containment.* If secondary containment is not provided for qualified oil-filled operational equipment pursuant to paragraph (c) of this section, the owner or operator of a facility with qualified oil-filled operational equipment must:	App. A
(k)(2)(i)	Establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and/or a discharge; and	3.2.2
(k)(2)(ii)	Unless you have submitted a response plan under § 112.20, provide in your Plan the following:	FRP (FRP) maintained separately
(k)(2)(ii)(A)	An oil spill contingency plan following the provisions of part 109 of this chapter,	See FRP
(k)(2)(ii)(B)	A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.	See FRP
112.8	Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities)	-----
(a)	Meet the general requirements for the Plan listed under § 112.7, and…	-----
(b)(1)	Restrain drainage from diked storage areas by valves or other positive means to prevent a spill...into the drainage system or inplant effluent treatment system, except where plan systems are designed to handle such leakage. You may empty diked areas by pumps or ejectors; however you must be manually activate these pumps…and inspect the condition of the accumulation before starting...	§ 4.1, 4.3
(b)(2)	Use valves of manual, open-and-closed design... If facility drainage drains directly into water course…you must inspect and drain uncontaminated retained stormwater, as provided in...paragraphs (c)(3)(ii)(iii), and (iv).	§ 4.1, 4.3
(b)(3)	Design facility drainage systems from undiked areas… to flow into ponds, lagoons or catchment basins, designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.	§ 4.2
(b)(4)	If...not engineered as in paragraphs (b)(3), equip the final discharge of all ditches with a diversion system that would...retain the oil in the facility.	§ 4.4
(b)(5)	Where drainage waters are treated in more than one treatment unit… provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques are used, facility drainage systems engineer… to prevent a discharge as described in § 112.1(b) in case there is an equipment failure or human error...	§ 5.1, App. A
(c)	*Bulk storage containers (onshore)*	-----
(c)(1)	Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage...	§ 5.1
(c)(2)	Construct all bulk storage container installations so that you provide a secondary means of containment for the entire contents of the largest single container plus sufficient freeboard to allow for precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil.	§ 5.1, App. A

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40 CFR § 112.3,5,7,8
CROSS REFERENCE (Cont'd)

40 CFR § 112	BRIEF DESCRIPTION	SECTION
(c)(3)	Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent discharge into an open water course, lake, or pond, bypassing the in-plant treatment system unless you:	-----
(c)(3)(i)	Normally keep the bypass valve sealed closed.	§ 4.1, 4.3
(c)(3)(ii)	Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).	§ 4.1, 4.3
(c)(3)(iii)	Open the bypass valve and reseal it following drainage…under responsible supervision.	§ 4.1, 4.3
(c)(3)(iv)	Keep adequate records of such events.	§ 3.2, 3.3, 4.3, App. B
(c)(4)	Protect any completely buried metallic storage tank installed on or after January 10,1974 from corrosion by coatings or cathodic protection…	§ 5.2
(c)(5)	Not use partially buried metallic tanks for the storage of oil unless the buried section of the tank is adequately coated…	§ 5.2
(c)(6)	Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs. You must determine, in accordance with industry standards, the appropriate qualifications for personnel performing test and inspections, the frequency and type of testing and inspections, which take into account container size, configuration, and design (such as containers that are: shop-built, field erected, skid-mounted, elevated, equipped with a liner, double-walled, or partially buried). Examples of these integrity tests include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emission testing, or other systems of non-destructive testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and test kept under usual and customary business practices satisfy the recordkeeping requirements of this paragraph.	§ 3.2
(c)(7)	Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines...	§ 5.4
(c)(8)	Engineer or update each container installation in accordance with good engineering practice to avoid discharges (and) provide at least one of the following devices:	-----
(c)(8)(i)	High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities, an audible air vent may suffice.	§ 5.1
(c)(8)(ii)	High liquid level pump cutoff devices set to stop flow at a predetermined container content level.	§ 5.1
(c)(8)(iii)	Direct audible or code signal communication between the container gauger and the pumping station.	§ 5.1
(c)(8)(iv)	A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges.	§ 5.1
(c)(8)(v)	You must regularly test liquid level sensing devices to ensure proper operation.	§ 5.1
(c)(9)	Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge…	§ 4.4
(c)(10)	Promptly correct visible discharges which result in a loss of oil from container including…seam, gaskets, piping, pumps, valves…	§ 5.1

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40 CFR § 112.3,5,7,8
CROSS REFERENCE (Cont'd)

40 CFR § 112	BRIEF DESCRIPTION	SECTION
(c)(11)	Position or locate mobile or portable oil storage container to prevent a discharge as described in § 112.1(b)…furnish a secondary means of containment...for the largest single compartment or container with sufficient freeboard…	§ 5.3
(d)	*Facility transfer operations, pumping, and facility process*	-----
(d)(1)	Provide buried piping… installed or replaced on or after August 16, 2002, with a protective wrapping and coating…cathodically protect. If a section of buried line is exposed...carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated...	§ 6.1
(d)(2)	Cap or blank-flange the terminal connection…and mark it as to origin when piping is not in service, or in standby service for an extended time.	§ 6.3, 8.4
(d)(3)	Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.	§ 3.2
(d)(4)	Regularly inspect all aboveground valves, piping, and appurtenances. …also conduct integrity and leak testing on buried piping at the time of installation, modification, construction, relocation, or replacement.	§ 3.2
(d)(5)	Warn all vehicles entering the facility to be sure that no vehicle will not endanger aboveground piping or other oil transfer operations.	§ 6.4